Training and Evaluation Outline Report

Status: Approved 30 Nov 2020 Effective Date: 30 Nov 2020

Task Number: 05-TM-5523

Task Title: Deploy the Single Anchor Leg Moor (SALM) in Support of Offshore Petroleum Discharge System (OPDS) Operations

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the MSCoE G2 foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without restrictions.

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary	Source Information
	ATP 3-34.40	General Engineering (http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp3_34x40.pdf)	Yes	No	
	ATP 5-19	RISK MANAGEMENT, with change 1 dated 8 Sep 2014	Yes	No	
	NAVSEA T9540-AE-OMI- 040	SALM OPDS Deployment and Retrieval Manual. 1993	Yes	Yes	
	SS521-AG-PRO-010	U.S. Navy Diving Manual. Revision 7 Change A	Yes	No	

Conditions: The element is directed to deploy a Single Anchor Leg Mooring (SALM) in a secured area as part of an Offshore Petroleum Discharge System (OPDS). The supported element has an operational SALM, all specifications and technical references, and any required specialized tools for the installation. Have identified the location and the route; the unit has communications with appropriate elements; the higher HQ OPORD, the unit, and higher HQ SOP's are available; the unit has been provided guidance on the rules of engagement and the rules of interaction. Perform this task under all environmental conditions; higher HQ analysis of the area of operations (AO) is available. The current at the installation site is not greater than 1.5 knots, the wind speed is less than 1.6 knots and wave height is less than 5 feet. The OPORD states the latest time by which to complete the task.

Note: The Commander must still determine at what level of training they would want the element to perform. Crawl, walk or run. This can only be determined after consideration as to the units training level.

The Commander prior to evaluating an element in the conduct of the task must determine if it will be conducted in a Live, Virtual, or Constructive environment, additionally it must also be determined which condition as described below that the element will conduct the task. The selection made for this task is at a trained level of proficiency. The commander must determine which of the environments below will best suit the unit and the proficiency level at which the unit is. When conducting crawl or walk level training units should not increase the intensity until the unit has achieved the standards and then unit trainers should include variables that increase proficiency in all conditions.

Note: The condition statement for this task is written assuming the highest training conditions reflected on the Task Proficiency matrix required for the evaluated unit to receive a "fully trained" (T) rating.

Note: Condition terms definitions.

Dynamic Operational Environment: Three or more operational and two or more mission variables change during the execution of the assessed task. Operational variables and threat Tactics, Techniques, and Procedures (TTPs) for assigned counter-tasks change in response to the execution of Blue Forces (BLUFOR) tasks.

Complex Operational Environment: Changes to four or more operational variables impact the chosen friendly COA/mission. Brigade and higher units require all eight operational variables of Political, Military, Economic, Social, Infrastructure, Information, Physical environment, and Time (PMESII-PT) to be replicated in varying degrees based on the task being trained.

Single threat: Regular, irregular, criminal or terrorist forces are present.

Hybrid threat: Diverse and dynamic combination of regular forces, irregular forces, and/or criminal elements all unified to achieve mutually benefiting effects.

This task should not be trained in MOPP 4.

Standards: The team installs the SALM, using specialized equipment in accordance with (IAW) the applicable Technical Manuals (TMs), Standing Operating Procedures (SOPs), or commercial operation manuals, not later than the time specified in the directive.

Note: Leaders are defined as the Squad Leaders, and Team Leaders.

Live Fire: No

Objective Task Evaluation Criteria Matrix:

Plan	Plan and Prepare		Execute					Assess										
Operations Environme	al ent	Training Environment (L/V/C)	Leaders Present at Training/Required	Present at Training/Required	External Eval	Performance Measures	Critical Performance Measures	Leader Performance Measures	Evaluator's Observed Task Proficiency Rating	Commander's Assessment								
Dynamic (Single Threat)			>=85%	>=80%	Yes	>=91%			>=90%	Т	Т							
Threat)		IAV	75-84%	>=0070	is	80- 90%	All	80- 89%	T-	Т-								
	Day	IAW unit CATS statement.	65-74%	75-79%		65- 79%		89%	Р	Р								
Static (Single Threat)		ent.	60-64%	60-74%	No	51- 64%											P-	P-
			<=59%	<=59%		<=50%	<all< td=""><td><=79%</td><td>U</td><td>U</td></all<>	<=79%	U	U								

Remarks: None

Notes: All required references and technical manuals will be provided by the local command.

Safety Risk: High

Task Statements

Cue: None

DANGER

Leaders have an inherent responsibility to conduct Risk Management to ensure the safety of all Soldiers and promote mission accomplishment.

WARNING

Risk management is the Army's primary decision-making process to identify hazards, reduce risk, and prevent both accidental and tactical loss. All Soldiers have the responsibility to learn and understand the risks associated with this task.

CAUTION

Identifying hazards and controlling risks across the full spectrum of Army functions, operations and activities is the responsibility of all Soldiers.

Performance Steps and Measures

NOTE: Assess task proficiency using the task evaluation criteria matrix.

NOTE: Asterisks (*) indicate leader steps; plus signs (+) indicate critical steps.

STEP/MEASURE	GO	NO-GO	N/A
+* 1. The element leaders conduct Troop-Leading Procedures (TLP) in preparation of deploying the SALM.			
+* 2. The element leader develops a dive safety plan.			
* a. Develops a risk assessment matrix.			
* b. Appoints a work site safety Non-Commissioned Officer (NCO).			
+* c. Develops a diving emergency plan/bill.			
* d. Briefs the safety plan to the element.			
+* 3. The element leader coordinates with the supported element's leadership.			
* a. Confirms assignment details and requested support for deploying the SALM.			
+* b. Verifies the SALM is complete and operational.			
* c. Confirms all OPDS diver-related equipment and tools are available.			
* d. Coordinates with the responsible element for procurement of missing or damaged equipment and tools.			
+ 4. The element conducts a reconnaissance of the OPDS installation site.			
+ a. Conducts a hydrographic and/or side scan survey of the OPDS installation site.			
+ b. Conducts survey of the deployment site for the SALM.			
(1) Verifies that the water depth is at least 15 feet more than the full load draft of the tanker.			
(2) Verifies that the depth of the SALM location does not exceed 190 feet.			
+ c. Conducts site survey for a tanker 4-point moor.			
(1) Verifies there are no obstructions or debris in the area that would endanger the tanker during mooring maneuvers.			
(2) Verifies that the distance between the mooring site and the Beach Termination Unit (BTU) does not exceed 24,000 feet in the case of a single conduit line, and not more than two nautical miles for two conduit lines.			
+ d. Surveys sites for an OPDS conduit pipeline route.			
+ 5. The element launches the SALM.			
+ a. Deploys the pigtail hoses.			
+ b. Floods the tanks in the prescribed sequence.			
+ c. Deploys the submarine hose.			
+ d. Resets valves.			
+ e. Inspects hoses and conduit.			
6. The element positions the SALM at the installation site.			
+ 7. The element deploys the SALM.			
+ a. Inspects hoses, conduit and connections when the SALM is stabilized on the bottom.			
+ b. Connects the mooring hawser to the buoy.			
+ 8. The element maintains the SALM.			
+ a. Conducts an initial startup inspection after the SALM has been deployed and all components of he OPDS are connected.			
+ b. Conducts inspections on components of the OPDS as prescribed in the technical manuals and references.			
+ c. Conducts inspection of the entire OPDS after all storms or collisions.			
9. The element assists in the recovery of the SALM.			
Confirms assignment details and requested support for recovering the SALM.			
b. Conducts pre-retrieval procedures in accordance with the prescribed technical manuals and references.			
c. Deballasts the buoyancy tanks in sequential order so SALM becomes buoyant.			
d. Deballasts the hull tanks in sequential order to bring the SALM to the surface.			
e. Inspects connecting hardware, including knots and eye splices, for serviceability and compatibility with ship lifting and towing equipment.			
f. Prepares the SALM for tow or recovery on the tanker.			
+* 10. The element leader supervises SALM deployment, maintenance and recovery operations.			
* a. Submits status reports in accordance with the unit Standing Operating Procedure (SOP).			
+* b. Continually monitors safety at the dive site.			
* c. Conducts an after action review (AAR).			
11. The element conducts recovery operations.			
a Accounts for all tools and diving aguinment			

a. Accounts for all tools and diving equipment.

b. Cleans and performs preventive maintenance checks and services (PMCS) on tools and dive		
equipment.		l
Leventeries and stands to also and diverges in accordance with write COD		

b. Cleans and performs preventive maintenance checks and services (PMCS) on tools and dive		ı
pment.		
c. Inventories and stores tools and dive gear in accordance with unit SOP.		

Task Performance Summary Block									
Training U	nit				ITER	ATION			
			1		2	3		4	
Date of Training pe	r Iteration:								
Day or Night Tr	aining:	Day /	Night	Day /	/ Night	Day /	Night	Day /	Night
		#	%	#	%	#	%	#	%
Total Leaders Authorized	% Leaders Present								
Total Soldiers Authorized	% Soldiers Present								
Total Number of Performance Measures	% Performance Measures 'GO'								
Total Number of Critical Performance Measures	% Critical Performance Measures 'GO'								
Live Fire, Total Number of Critical Performance Measures	% Critical Performance Measures 'GO'								
Total Number of Leader Performance Measures	% Leader Performance Measures 'GO'								
MOPP LEVEL									
Evaluated Rating per Iteration T, T-, P, P-, U									

Mission(s) supported: None

MOPP 4: Never

MOPP 4 Statement: None

NVG: Never

NVG Statement: None

Prerequisite Collective Task(s): None

Supporting Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
1.	71-CO-5100	Conduct Troop Leading Procedures	71 - Mission Command (Collective)	Approved
5.	05-PLT-5507	Perform Surface-Supplied Diving Operations	05 - Engineers (Collective)	Approved
5.	05-PLT-5509	Perform Self-Contained Underwater Breathing Apparatus (Scuba) Operations	05 - Engineers (Collective)	Approved
10.	05-CO-0018	Conduct Report Procedures	05 - Engineers (Collective)	Approved
11.	43-CO-4575	Conduct Preventive Maintenance Checks and Services	43 - Maintenance (except missile) (Collective)	Approved

OPFOR Task(s):

Task Number	Title	Status
71-CO-8510	OPFOR Disrupt	Approved

Supporting Individual Task(s):

Step Number	Task Number	Title	Proponent	Status
	052-238-1647	Operate a Hydrographic Survey System	052 - Engineer (Individual)	Approved

Supporting Drill(s): None

Supported AUTL/UJTL Task(s):

Task ID	Title
ART 1.6.4	Provide Diver Support

TADSS

TADSS ID	Title	Product Type	Quantity
No TADSS specified			

Equipment (LIN)

LIN	Nomenclature	Qty
D32859	DIV EQ ST DIV SUP A	1
D32723	DIV EQ ST OPEN CIR	1
D32927	DIV EQ ST DIV SUP B	1
92018N	Cylinder Scuba Tanks, 3500 Psi 80-102 Cu Ft	1
D49154	DIV EQ ST IND SWMMR	1

Materiel Items (NSN)

NSN	LIN	Title	Qty
No materiel items specified			

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card.

Safety: In a training environment, leaders must perform a risk assessment in accordance with current Risk Management Doctrine. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW current CBRN doctrine.