

Training and Evaluation Outline Report

Status: Approved

06 Apr 2015

Effective Date: 05 Oct 2016

Task Number: 05-TM-5513

Task Title: Maintain Mooring Systems

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 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
	ATP 5-19 (Change 001 09/08/2014 78 Pages)	RISK MANAGEMENT http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp5_19.pdf	Yes	No
	DD FORM 314	PREVENTIVE MAINTENCE SCHEDULE & RECORD	Yes	No
	NTRP 4-04.2.8	Conventional Underwater Construction and Repair Techniques	Yes	No
	NTRP 4-04.2.9	Expedient Underwater Construction and Repair Techniques	Yes	No
	SS521-AG-PRO-010	U.S. Navy Diving Manual. Revision 6	Yes	No
	TM 3-34.73	PORT CONSTRUCTION AND REPAIR	Yes	No
	TM 3-34.83	ENGINEER DIVING OPERATIONS	Yes	Yes

Conditions: The dive team receives an Operations Order (OPORD) from higher to maintain mooring systems. Plans specifications, as-built drawings and maintenance records are available. All organic equipment and personnel are available. Security is provided by the supported element.

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 establishes a diving station with maintenance materials, surface support vessels. The team inspects a mooring system and determines the overall condition of the system, including buoys, zincs, chains, ground rings and anchors. The team performs scheduled maintenance according to Department of Defense (DD) Form 314 or maintenance records and records the overall condition of the mooring system to ensure continual service of the system rated capacity.

Note: Leaders are defined as the Commander, Executive Officer, First Sergeant, Operations Sergeant, Platoon Leaders, Platoon Sergeants, Squad Leaders, and Team Leaders.

Live Fire Required: No

Objective Task Evaluation Criteria Matrix:

Plan and Prepare		Execute						Assess	
Operational Environment	Training Environment (LV/C)	Training/Authorized % of Leaders Present at	% of Soldiers Present at	External Eval	% Performance Measures 'GO'	% Critical Performance Measures 'GO'	% Leader Performance Measures 'GO'	Task Assessment	
SQD & PLT									
Static (Single Threat)	Day	IAW unit CATS statement.	>=85%	>=80%	Yes	>=91%	>=90%	T	
			75-84%			80-90%		All	T-
			65-74%	75-79%	No	65-79%	80-89%	P	
			60-64%	60-74%		51-64%	<All	<=79%	P-
			<=59%	<=59%		<=50%			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. Voice communications between the divers and the dive supervisor is required when using scuba gear or surface-supplied diving gear with powered tools.

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. Exercise extreme caution while using any high-pressure cleaning systems. The water jet is capable of cutting skin and bones. Never point the jet at anyone, even underwater and even when it is presumed to be off.

CAUTION

Identifying hazards and controlling risks across the full spectrum of Army functions, operations and activities is the responsibility of all Soldiers. Where practical, surface-supplied diving gear is preferable to scuba gear whenever working with powered tools.

Step Number	Task Number	Title	Proponent	Status
	05-3-5507	Perform Surface-Supplied Diving Operations	05 - Engineers (Collective)	Approved
	05-3-5509	Perform Self-Contained Underwater Breathing Apparatus (Scuba) Operations	05 - Engineers (Collective)	Approved
	05-3-5511	Clear Underwater Obstacles	05 - Engineers (Collective)	Approved
	05-5-5555	Install Conventional Underwater Anchor System	05 - Engineers (Collective)	Approved
	05-CO-0007	Prepare an Operation Order (OPORD)	05 - Engineers (Collective)	Approved
	05-CO-0018	Conduct Report Procedures	05 - Engineers (Collective)	Approved
6.	05-CO-0018	Conduct Report Procedures	05 - Engineers (Collective)	Approved

OPFOR Task(s):

Task Number	Title	Status
71-2-9002	OPFOR Ambush(Company and below)	Approved
71-CO-9004	OPFOR Reconnaissance Attack (Company and below)	Approved

Supporting Individual Task(s):

Step Number	Task Number	Title	Proponent	Status
	052-238-1201	Conduct a Dive Using Surface Supplied Diving Equipment	052 - Engineer (Individual)	Approved
	052-238-1202	Conduct a Dive Using SCUBA Diving Equipment	052 - Engineer (Individual)	Approved
	052-238-1207	Inspect a Mooring System	052 - Engineer (Individual)	Approved
	052-238-1531	Perform Underwater Searches	052 - Engineer (Individual)	Approved
	052-238-1533	Navigate Underwater by Compass	052 - Engineer (Individual)	Approved
	052-238-1605	Set Up Arc Welding Equipment for Underwater Use	052 - Engineer (Individual)	Approved
	052-238-1606	Set Up Oxygen Arc-Cutting Equipment for Underwater Use	052 - Engineer (Individual)	Approved
	052-238-1607	Perform Underwater Photography	052 - Engineer (Individual)	Approved
	052-238-1626	Perform Underwater Weight-Handling Techniques	052 - Engineer (Individual)	Approved
	052-238-1630	Operate Arc Welding Equipment Underwater	052 - Engineer (Individual)	Approved
	052-238-1631	Operate Oxygen Arc-Cutting Equipment Underwater	052 - Engineer (Individual)	Approved
	052-238-1632	Operate a Hydraulic Power Unit	052 - Engineer (Individual)	Approved
	052-238-1661	Operate a Diving Communications Station	052 - Engineer (Individual)	Approved
	052-238-2511	Direct the Setup of a Scuba Station	052 - Engineer (Individual)	Approved
	052-238-2512	Direct the Setup of a Surface-Supplied Dive Station	052 - Engineer (Individual)	Approved
	052-238-3411	Conduct a Pre-dive Briefing of a Surface-Supplied Dive Station	052 - Engineer (Individual)	Approved
	052-238-3412	Select a Decompression Method	052 - Engineer (Individual)	Approved
	052-238-3413	Supervise a Scuba Dive Station	052 - Engineer (Individual)	Approved
	052-238-3414	Supervise a Surface-Supplied Dive Station	052 - Engineer (Individual)	Approved
	052-238-3416	Calculate Breathing Gas Requirements to Support Diving Operations	052 - Engineer (Individual)	Approved
	052-238-3431	Conduct a Pre-dive Briefing of a Scuba Dive Station	052 - Engineer (Individual)	Approved
	052-238-3441	Supervise an Underwater Searching Operation	052 - Engineer (Individual)	Approved
	052-238-3442	Supervise Underwater Construction	052 - Engineer (Individual)	Approved
	052-238-3443	Supervise Underwater Inspection	052 - Engineer (Individual)	Approved
	052-238-4508	Prepare a Diving-Mission Operation Order (OPORD)	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
D49154	DIV EQ ST IND SWMMR	1
C73191	Compressor Unit RCP: Air Diesel Driven Skid Mounted 24CFM 3200 PSI	1
D49494	DIVING EQUIP ST	1
D32723	DIV EQ ST OPEN CIR	1
G32815	Diving Equipment Set, 2 Person, 120 Foot Depth (Army)	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 ATP 5-19, Risk Management. 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 FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. .