

Training and Evaluation Outline Report

Status: Approved

06 Apr 2015

Effective Date: 05 Oct 2016

Task Number: 05-TM-5515

Task Title: Perform Salvage/Recovery 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 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
	AR 611-75	MANAGEMENT OF ARMY DIVERS	Yes	No
	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
	NAVSEA S0300-A6-MAN-020	U.S. Navy Salvage Manual, Volume 2, Harbor Clearance.	Yes	No
	SS521-AG-PRO-010	U.S. Navy Diving Manual. Revision 6	Yes	Yes
	TM 3-34.86	Rigging Techniques, Procedures, and Applications (MCRP 3-17.7j)	Yes	No

Conditions: The dive team is directed to conduct salvage operations. All organic personnel and equipment are available. Additional required equipment, such as cranes and tugs 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 completes salvage operations per the directive not later than the specified time, securing the project on the surface, and recovering all personnel and equipment without causing injury to personnel or harm to the environment.

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 (LW/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												
Dynamic (Single Threat)	IAW unit CATS statement:				Yes		All	80-89%	>=85%			
									>=80%	>=91%	>=90%	T
75-84%									80-90%		T-	
65-74%									75-79%	65-79%		P
60-64%									60-74%	51-64%		P-
Static (Single Threat)					No		<All	<=79%	U			
	Day											

Remarks: None

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

Safety Risk: High

Task Statements

DANGER

Leaders have an inherent responsibility to conduct Risk Management to ensure the safety of all Soldiers and promote mission accomplishment. Positive two-way surface communication with topside is required. Failure to comply may cause immediate personal injury or damage to equipment.

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.

Use only approved diving gear suitable for the application where toxic hazards exist and where the surrounding water is contaminated and is a danger to the diver. Failure to comply may cause personal injury.

CAUTION

Identifying hazards and controlling risks across the full spectrum of Army functions, operations and activities is the responsibility of all Soldiers. Do not operate a salvage pump unless the casing is filled with water to the level of the suction port. Operating a dry pump will cause overheating and damage the unit. Long-term failure to comply may cause personal injury and/or damage to the equipment.

Supporting Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
	05-3-5502	Perform Underwater Demolitions Operations	05 - Engineers (Collective)	Approved
	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
7.	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
	052-238-1531	Perform Underwater Searches	052 - Engineer (Individual)	Approved
	052-238-1532	Perform a River Reconnaissance	052 - Engineer (Individual)	Approved
	052-238-1533	Navigate Underwater by Compass	052 - Engineer (Individual)	Approved
	052-238-1603	Place Underwater Excavation Charges	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
	052-238-1610	Construct a Salvage Patch	052 - Engineer (Individual)	Approved
	052-238-1625	Perform a Nonexplosive Underwater-Excavation Technique	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
	052-238-1633	Operate Hydraulic Tools Underwater	052 - Engineer (Individual)	Approved
	052-238-1644	Operate a Salvage Pump	052 - Engineer (Individual)	Approved
	052-238-1649	Tie Knots Used in Salvage Operations	052 - Engineer (Individual)	Approved
	052-238-1650	Perform as a Member of a Hull Inspection Team	052 - Engineer (Individual)	Approved
	052-238-1651	Perform Repairs of Vessels	052 - Engineer (Individual)	Approved
	052-238-1652	Perform an Underwater Survey	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
	052-238-2520	Design a Salvage Patch	052 - Engineer (Individual)	Approved
	052-238-2521	Design a Tackle System for Underwater Lifts	052 - Engineer (Individual)	Approved
	052-238-3400	Calculate Underwater Excavation Charges	052 - Engineer (Individual)	Approved
	052-238-3401	Direct an Underwater Demolition Operation	052 - Engineer (Individual)	Approved
	052-238-3408	Direct a Salvage and Recovery Operation	052 - Engineer (Individual)	Approved
	052-238-3411	Conduct a Pre-dive Briefing of a Surface-Supplied Dive Station	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
	052-238-3443	Supervise Underwater Inspection	052 - Engineer (Individual)	Approved
	052-238-3447	Supervise a Scuba Dive	052 - Engineer (Individual)	Approved
	052-238-3448	Supervise a Surface-Supplied Dive	052 - Engineer (Individual)	Approved
	052-238-3468	Determine Available Pump Suction for Salvage Operations	052 - Engineer (Individual)	Approved
	052-238-4503	Supervise an Initial Underwater Salvage Survey	052 - Engineer (Individual)	Approved
	052-238-4504	Determine the Technique for a Ship Salvage Operation	052 - Engineer (Individual)	Approved
	052-238-4505	Determine the Logistical Requirements in Support of a Ship Salvage Operation	052 - Engineer (Individual)	Approved
	052-238-4517	Coordinate Underwater Demolition Operations	052 - Engineer (Individual)	Approved
	052-238-4519	Determine the Technique for a Salvage Operation	052 - Engineer (Individual)	Approved
	052-238-4520	Determine Logistical Requirements in Support of a Salvage Operation	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
B84293	Boat Landing Craft Inflatable: 7 Person	1
P34402	OUTBOARD MOTOR GAS	1
D32927	DIV EQ ST DIV SUP B	1
D49154	DIV EQ ST IND SWMMR	1
N96248	Navigation Set: Satellite Signals AN/PSN-13	1
C73191	Compressor Unit RCP: Air Diesel Driven Skid Mounted 24CFM 3200 PSI	1
D32723	DIV EQ ST OPEN CIR	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. .