Training and Evaluation Outline Report

Status: Approved 21 Oct 2015 Effective Date: 26 Aug 2020

Task Number: 10-PLT-0202

Task Title: Conduct Petroleum Pipeline Operating Platoon Operations

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

Destruction Notice: None

Foreign Disclosure: FD3 - This training product has been reviewed by the developers in coordination with the CASCOM, Fort Lee, Virginia

foreign disclosure officer. This training product cannot be used to instruct international military students.

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary	Source Information
	AR 200-1	ENVIRONMENTAL PROTECTION AND ENHANCEMENT	Yes	No	
	ATP 3-34.22	ENGINEER OPERATIONS - BRIGADE COMBAT TEAM AND BELOW	Yes	No	
	ATP 3-34.40	General Engineering (http://armypubs.army.mil/doctrine/DR_pubs/dr_a/pdf/atp3_34x40.pdf)	Yes	No	
	ATP 4-43	Petroleum Supply Operations	Yes	Yes	
	Sup 1 to AR 385-10	The Army Safety Program	Yes	No	
	TM 3-34.70	Plumbing, Pipe Fitting, and Sewerage	Yes	No	

Conditions: The Petroleum Pipeline Operating Platoon receives an operations order (OPORD) from higher headquarters (HQ) to direct operation of multiproduct pipeline and pump stations. The platoon operations are established in support of a higher HQ operational mission. The platoon has primary access to main supply routes, external logistical support, and it is accessible to all supported and supporting customers/units. Continuous digital and analog communications have been established. All applicable regulations, internal and external tactical standard operating procedures (TSOP), technical manuals (TMs), and field manuals (FMs) are on-hand as reference material. The platoon personnel have been provided guidance on rules of engagement for this mission. Threat capabilities include opposing forces which have the ability to gather information, interact with hostile force sympathizers, coordinate suicide bombings, set up improvised explosive devices, coordinate air support, and execute reinforced platoon/squad operations in a chemical, biological, radiological, and nuclear (CBRN) environment. Mission, enemy, terrain and weather, troops and support available-time available and civil considerations (METT-TC) identified constraints must be considered. The platoon is not likely to be attacked with hostile enemy fire or chemical agents. This task will be performed under all environmental conditions. All authorized equipment is on hand and operational. All section personnel are available to conduct all day and night operations. Specified time constraints are identified in the operations order. The section has adequate time to prepare. Unit leaders are present in the area of operations. This task should not be trained in MOPP 4.

Standards: The Petroleum Pipeline Operating Platoon directs operation of multiproduct pipeline and pump stations with the use of all available equipment and personnel within the specified time constraints in the mission OPORD and in accordance with (IAW) the approved Army standards identified in the Task Evaluation Criteria Matrix which is included in this task below, commanders guidance, applicable internal and external TSOPs, and approved Army regulations.

LEADER STATEMENT: An Army leader is anyone who by virtue of assumed role or assigned responsibility inspires and influences people to accomplish organizational goals. Leadership is not limited to or synonymous with an assigned duty, position, or given rank as it also manifests itself in both informal and collective forms. Informal leadership provides knowledge, experience, and technical expertise while collective leadership results through the combined effects and synergies of leaders at different levels and experience collaborating to achieve a common purpose. Informal and collective leadership can include positions with an expanded scope of responsibility, significance and operational / mission implications. Therefore, for the purpose of training this task, Leaders are not only defined as officers, warrant officers, noncommissioned officers, and Army civilians but also include individuals who are Subject Matter Experts (SME) which possess the requisite knowledge and skill set to perform a particular task (i.e., conduct an operation, provide logistics, or operate specific equipment, etc.) at the tactical through strategic level as the situation and/or mission dictates.

Live Fire: No

Objective Task Evaluation Criteria Matrix:

Plan	an	d Prepare		Ex	ec	ute			Ass	ess
Operation Environme	al	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
	Night	IAW	75-84%	>=80%	98	80- 90%	All	80-	T-	T-
		IAW unit CATS statement.	65-74%	75-79%		65- 79%		80- 89%	Р	P
Static (Single Threat)	Day	ent.	60-64%	60-74%	No	51- 64%	All	700/	P-	P-
	ау		<=59%	<=59%		<=50%	<all< td=""><td><=79%</td><td>U</td><td>U</td></all<>	<=79%	U	U

Remarks: Task steps and performance measures are arranged in a logical order and are not intended to be interpreted as a "required order" for performance. These task steps and/or performance measures of collective task may not always be applicable to every unit. Prior to evaluation, coordination should be made between the evaluator, the unit itself, and the evaluated units' higher headquarters (if required) to determine the task step(s) and/or performance measure(s) that may be omitted and/or must be performed. Training begins with the execution of pre-combat checks and inspections. Training ends when designated training objectives for the particular training events or exercises are performed to Army standard. Unit leadership should conduct an after action report (AAR) to determine future training requirements for the unit.

Task Evaluation Criteria Matrix Definitions:

Static: Aspects of operational variables (PMESII-PT) needed to stimulate mission variables (METT-TC) are fixed throughout the unit's execution of the task.

Dynamic: Operational variables and Threat TTPs for assigned counter- tasks change in response to the execution of BLUFOR's task.

Complex: Requires a minimum of four (Terrain, Time, Military [Threat], and Social [Population]) or more operational variables; brigade and higher units require all eight operational variables (PMESII-PT) to be replicated in varying degrees based on the task being trained.

Single Threat: Regular, irregular, criminal, or terrorist.

Hybrid Threat: The diverse and dynamic combination of regular forces, irregular forces, terrorist forces, and/or criminal elements unified to achieve mutually benefitting effects.

To obtain a T or T- this task must be conducted in a dynamic and complex environment with 4 plus OE variables and a hybrid threat at night with 75% or more leaders present, greater than 80% of Soldiers present, receive a "GO" on 80% or more of the performance measures, ALL of the critical performance measures and at least 80% "GO" on the leader performance measures. Must be conducted during an external evaluation.

Task steps and measures were developed using the Plan, Prepare, Execute and Assess (PPEA) construct to reinforce the operations process and is implied throughout the T&EO as applicable.

Notes:

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS: You can help improve this collective task. If you find any errors, or if you would like to recommend any improvements to the procedures in this collective task, please let us know. The preferred method is to submit a DA Form 2028 (Recommended Changes to Publications and Blank Forms) with your recommended changes via email to usarmy.lee.tradoc.mbx.cascom-g3-collective@mail.mil. Your recommended changes will be reviewed, validated to ensure approved Army or joint doctrine supports your recommendation(s), implemented as applicable, and a reply will be furnished to you.

Safety Risk: Low

Task Statements

Cue: The Petroleum Pipeline Operating Platoon has received an operations order (OPORD) from higher headquarters (HQ) to direct operation of multiproduct pipeline and pump stations.

DANGER

Suspend all handling of the pipeline system when an electrical storm is within 5-mile radius of your operation, during high winds, or when your commander notifies you. Soldiers must constantly be alert for and avoid situations that may result in injury or death. At the training site, leaders must establish training safety overview procedures.

WARNING

Avoid working around pressurized pipeline. If you must work in such areas, try to remain shielded by large pieces of equipment or vehicles. Soldiers must be alert to human error and know the capabilities and limitations of the equipment and vehicles they use. Following the proper safety procedures preserves troop strength by preventing personnel losses through accidents.

CAUTION

Leaders must be aware of the hazards involved with the construction, operation, maintenance, of petroleum pipelines and must take measures to prevent accidents. Potential hazards must be identified and reduced before each operation is started. Remain cognizant of the possibility of personal injury or damage to equipment that may result from long-term failure to follow correct procedures.

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. Platoon Leader directs pipeline operating platoon operations. a. Direct the operations of the pipeline and pump stations. b. Prepare TSOPs, directives, and other operating instructions. c. Plan training for all platoon personnel. d. Coordinate with company commander on need for more persons for patrol duty, firefighting, surveillance, and defense. e. Ensure that Soldiers know how to operate the assigned equipment. f. Receive and review the daily pumping order from higher headquarters and sets up the work schedule. g. Establish the environmental and spill control programs. h. Publish fire regulations and schedule fire protection training. i. Establish pipeline/hoseline patrol force. j. Conduct fire drills. k. Schedule line sampling and testing during pumping operations and make decision on use or disposition of product. + 2. Platoon Sergeant assists the Platoon Leader in the operations of the platoon. a. Assists the platoon leader in assigning duties to platoon personnel. b. Schedule personnel for appropriate work rest cycle IAW Army regulations. c. Monitor platoon personnel during pipeline operating operations. d. Operate the communications and electronics equipment for the platoon. e. Prepare daily, weekly, quarterly, monthly and annual reports as required or dictated by TSOP. f. Monitor the pumping of pipeline products and stations, personnel, and equipment. + 3. Platoon personnel perform pipeline operations administrative functions. a. Maintain communications with higher and subordinate elements. b. Coordinate with Product Control Section for daily pumping order, 24 hours in advance of operations. c. Issue daily pumping orders to subordinates. d. Maintain operating directives tracking log. e. Maintain pump station records and administrative files. f. Coordinate with Service Support Section for ground maintenance. g. Coordinate patrolling of pipeline/hoseline with section leaders. h. Maintain quality surveillance IAW applicable regulations. i. Prepares and sends to the chief dispatcher at battalion operations reports covering hourly pumping and delivery information. + 4. Horizontal Construction Engineer personnel operate engineer equipment. a. Routinely inspect the pipeline and pump stations. b. Identify required pipeline and pump station maintenance. c. Track pipeline and pump station maintenance and submit reports to the platoon leaders IAW TSOP. d. Operate unit engineer equipment as needed. e. Move hose line flaking boxes as necessary or directed. f. Inform the platoon leaders of mission requirements that exceed unit capability. + 5. Pipeline Operating Platoon personnel conduct pipeline operating platoon operations. a. Pump batches of petroleum product into the line at times shown in the daily orders or OPORD. b. Notify all stations of the starting time, quantity, route, and destination. c. Ensure pump stations report to the headquarters every hour on cumulative barrels pumped, line temperatures, pressures, product codes, and batch numbers IAW applicable regulations. d. Comply with petroleum sampling requirements IAW applicable regulations. e. Monitor petroleum pumping operations and identify potential problems or petroleum shortages. f. Monitor delivery operations. g. Interface with supporting and supported element as necessary. h. Ensure proper shut down procedures are followed and IAW applicable equipment regulations.

a. Provide personnel to perform minor field and sustainment maintenance on pipeline pump stations, and related equipment common to the pipeline system.

i. Submit status reports to commander IAW company and/or platoon TSOP. + 6. Service Support Section personnel perform petroleum pipeline maintenance functions.

b. Report status of personnel that may work up to 75 miles from base operations to higher headquarters. c. Order vehicle and equipment parts, repair and replacement valves, blinds, pressure gauges, meters, and line strainers, pump units, welded pipelines, coupled lines, hose lines and other related pipeline equipment to support mission as required. d. Conduct day-to-day care of equipment before and during pipeline operations. e. Inspect pumping equipment for leaks and for signs that the equipment needs adjusting or repairing. f. Provide technical assistance as required to other platoon or company elements as required. + 7. Pipeline Section personnel conduct pipeline and pump station operations. a. Identify starting time, quantity, route, and destination of product. b. Pump petroleum in accordance with applicable TMs. c. Clean pipelines/hoseline in accordance with applicable publications. d. Monitor pressure gauges and meters for correct readings. e. Report interface arrival. f. Report pumping information hourly to Platoon Headquarters. g. Maintain communications with higher and subordinate elements. h. Forward messages to Platoon Headquarters. i. Perform shutdown procedures when order is given. j. Draw samples for testing. k. Project maintenance and repair requirements. I. Patrol pipeline/hoseline to detect leaks, pilferage, and sabotage. m. Employ quality surveillance measures during pumping operations. +* 8. Leaders manage administrative functions as appropriate, directed, or required. a. Conduct troop leading procedures. b. Manage composite risk management assessments. c. Provide logistics status reports to higher HQ IAW TSOP. d. Maintain communications with higher HQ IAW TSOP. e. Supervise before, during, and after preventive maintenance checks and services (PMCS) on organic equipment. f. Enforce operations security (OPSEC) procedures at all times. g. Enforce safety regulations and established unit's internal and external TSOP's. h. Ensure that all Army sites and operations attain and sustain 100 percent compliance with environmental laws and regulations in a climate of changing requirements to prevent a notice of violation or a fine for not complying with following host nation, local, state, federal, higher headquarters environmental directives and policies. i. Direct destruction of unit equipment to prevent enemy use as situations dictate.

Task Performance Summary Block										
Training U		ITERATION								
					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 LEV	EL									
Evaluated Rating per Iteration T, T-, P, P-, U										

Mission(s) supported: None

MOPP 4: Never

MOPP 4 Statement: This task is not intended to be performed in MOPP 4. However, if necessary during an unexpected interim chemical, biological, radiological, and nuclear (CBRN) situation, ensure personal protective measures have been taken before proceeding with any measure to protect or decontaminate equipment. Failure to observe this precaution may result in serious illness, injury, or death to personnel by CBRN agents. Perform immediate operational or thorough decontamination procedures in accordance with applicable equipment TM's, CBRN doctrine, and unit TSOP as the mission, resources, and tactical situation permits. The CBRN Specialist should test unit equipment for levels of contamination after the all clear signal has been given and prior to resuming mission operations.

NVG: Never

NVG Statement: Night vision goggles are not required to conduct this task. However, they may be required when conducting sustainment unit operations, during movement, or Soldier duties as assigned.

Prerequisite Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
	10-CO-0012	Establish Petroleum Pipeline and Terminal Operating Operations	10 - Quartermaster (Collective)	Approved

Supporting Collective Task(s):

Step Number	Task Number	Title	Proponent	Status
	10-SEC-0221	Conduct Petroleum Pipeline Section Operations	10 - Quartermaster (Collective)	Approved
	10-SEC-0227	Conduct Petroleum Service Support Section Operations	10 - Quartermaster (Collective)	Approved

OPFOR Task(s): None

Supporting Individual Task(s):

Step Number	Task Number	Title	Proponent	Status
•	052-12K-1061	Maintain Plumbing Tools	052 - Engineer (Individual)	Approved
	052-12N-1006	Perform Operators Preventive Maintenance Checks and Services (PMCS)	052 - Engineer (Individual)	Approved
	052-248-1021	Identify Plumbing Materials	052 - Engineer (Individual)	Approved
	052-248-1040	Interpret Plumbing Prints and Drawings	052 - Engineer (Individual)	Approved
	052-248-1043	Repair Steel, Plastic, and Copper Pipes	052 - Engineer (Individual)	Approved
	091-91B-1036	Maintain Fuel System on a Wheeled Vehicle	091 - Ordnance (Individual)	Approved
	091-91D-1185	Correct Malfunction of the Fuel System on a Diesel Engine of a Tactical Power System	091 - Ordnance (Individual)	Approved
	091-91L-1016	Perform Battle Damage Assessment and Repair (BDAR) on Construction Equipment	091 - Ordnance (Individual)	Approved
	091-91L-1017	Perform Scheduled Services on Construction Equipment	091 - Ordnance (Individual)	Approved
	091-91L-1024	Maintain the Fuel System on Construction Equipment	091 - Ordnance (Individual)	Approved
	101-23A-6004	Administer Petroleum Dispatch Operations (Battalion and Below)	101 - Quartermaster (Individual)	Approved
	101-92A-1008	Request an Item of Supply	101 - Quartermaster (Individual)	Approved
	101-92L-2312	Supervise the Operation of a Petroleum Additive Injector Assembly	101 - Quartermaster (Individual)	Approved

Supporting Drill(s): None

Supported AUTL/UJTL Task(s):

Task ID	Title
ART 4.1.3.3.1	Provide Bulk Fuel

TADSS

TADSS ID	Title	Product Type	Quantity
No TADSS specified			

Equipment (LIN)

LIN	Nomenclature	Qty
No equipment specified		

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.

It is the responsibility of all Soldiers and Department of the Army civilians to protect the environment from damage. Army personnel must take care of the

environment; that is, practice environmental stewardship. All operations conducted on Army installations will comply with federal, state, local and host-nation environmental requirements and Army regulations. Army personnel will sustain compliance at all sites in the US and abroad, establishing good relationships with communities and regulators.

Environmental risk management consists of the following steps:

- a. Identify Hazards. Identify potential sources for environmental degradation during analysis of METT-TC factors. This requires identification of environmental hazards. An environmental hazard is a condition with the potential for polluting air, soil, or water and or destroying cultural and historical artifacts.
- b. Assess the Hazard. Analyze potential severity of environmental degradation using the Environmental Risk Assessment. Severity of environmental degradation is considered when determining the potential effect an operation will have on the environment. The risk impact value is defined as an indicator of the severity of environmental degradation. Quantify the risk to the environment resulting from the operation as extremely high, medium, or low, using the environmental risk assessment matrixes.
- c. Make Environmental Risk Decisions. Make decisions and develop measures to reduce high environmental risks.
- d. Brief Chain of Command. Brief chain of command (to include installation environmental office, if applicable), on proposed plans and pertinent high-risk environmental matrixes. Risk decisions are made at a level of command that corresponds to the degree of risk.

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.

Leaders must verify the structural soundness of all training and evaluation plans from a safety viewpoint. Leaders must conduct training at levels consistent with the abilities of the Soldiers being trained. They must instill an awareness of individual safety in all subordinate leaders and Soldiers. Soldiers must constantly be alert for and avoid situations that may result in injury or death. Be aware of the following:

- a. At the training site, leaders must establish training safety overview procedures. Safety procedures should emphasize the adherence to standards, consideration of environmental factors (for example wet bulb), risk assessment, and factors contributing to and aiding in the prevention of accidents. Responsible individuals must know how to balance the risks against the training requirements and monitor conditions for safety and health hazards (to eliminate or control them). Leaders must ensure the welfare of their soldiers in all situations.
- b. Leaders must establish a buddy system for safety. Soldiers should maintain a safety watch on each other, with emphasis on individual safety training, and first aid responsibilities. All unsafe conditions and unsafe acts must be recognized and reported. Soldiers must be alert to human error and know the capabilities and limitations of the equipment and vehicles they use. Following the proper safety procedures preserves troop strength by preventing personnel losses through accidents.