Training and Evaluation Outline Report

Status: Approved 22 Oct 2015 Effective Date: 01 Oct 2020

Task Number: 10-SEC-0227

Task Title: Conduct Petroleum Service Support Section Operations

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Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the CASCOM, Fort Lee, Virginia 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 3-34.5	Environmental Considerations	Yes	No	http://www.army.mil/usapa/d octrine/Active_FM.html
	ATP 4-43	Petroleum Supply Operations	Yes	Yes	
	ATP 5-19	RISK MANAGEMENT, with change 1 dated 8 Sep 2014	Yes	No	http://www.army.mil/usapa/d octrine/Active_FM.html
	PAM 710-2-1	USING UNIT SUPPLY SYSTEM (MANUAL PROCEDURES)	Yes	No	
	PAM 710-2-2	SUPPLY SUPPORT ACTIVITY SUPPLY SYSTEM: MANUAL PROCEDURES	Yes	No	
	TM 3-34.70	Plumbing, Pipe Fitting, and Sewerage	Yes	No	

Conditions: The Petroleum Service Support Section has received an operations order (OPORD) from higher headquarters (HQ) to provide personnel to perform field and sustainment maintenance on pipeline pump stations, and related equipment common to the pipeline system. Personnel may work up to 75 miles from base operations. Maintenance functions include ordering vehicle and equipment parts, repairing and replacing valves, blinds, pressure gauges, meters, and line strainers, pump units, welded pipelines, coupled lines, hose lines and other related pipeline equipment. The section operations are established in support of a higher HQ operational mission. The section 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 section 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 section 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 assigned and/or attached personnel are available to conduct all day and night operations. Specified time constraints are identified in the operations order. The section has adequate time

Standards: The Petroleum Service Support Section provides personnel to perform field and sustainment maintenance on pipeline pump stations, and related equipment common to the pipeline system 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.

Plan	Plan and Prepare		Execute					Assess		
Operation Environme SQD & PLT	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			>=85%	>=80%	Yes	>=91%		>=90%	т	т
Dynamic (Single Threat)	Night	IAV	75-84%	>=80%	8	80- 90% All	All	80-	T-	T-
		IAW unit CATS statement.	65-74%	75-79%		65- 79%		89%	Ρ	Ρ
Static (Single Threat)	Day	ont.	60-64%	60-74%	No	51- 64%	<all< td=""><td><=79%</td><td>P-</td><td>P-</td></all<>	<=79%	P-	P-
	V		<=59%	<=59%		<=50%		<=1370	U	U

Objective Task Evaluation Criteria Matrix:

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 Service Support Section has received an operations order (OPORD) from higher headquarters (HQ) to provide personnel to perform field and sustainment maintenance on pipeline pump stations, and related equipment common to the pipeline system.

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. Avoid prolonged exposure to vapors which may cause headaches, dizziness, nausea, unconsciousness, and possible death. 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. Service Support Section NCOIC manages section operations. a. Provide personnel to perform field and sustainment maintenance on pipeline pump stations and related equipment particular to the pipeline. b. Oversee service support section operations. c. Coordinate with Product Control Section or platoon leaders for daily pumping order, 24 hours in advance of operations. d. Coordinate with the supporting engineer command when major pipeline or pump station repairs are required. e. Coordinate patrolling of pipeline/hoseline with section leaders. f. Issue daily pumping orders to subordinates. g. Maintain communications with higher and subordinate elements. + 2. Service Support Section personnel inspect petroleum pipeline. a. Conduct preventive maintenance checks and services (PMCS) on pipeline before and during pipeline operations b. Inspect the pumping equipment for leaks and for signs that the equipment needs adjusting or repairing. c. Perform minor pipeline repairs that are within the limits and capabilities of the unit and organic equipment IAW applicable TM. d. Report petroleum pipeline defects that cannot be repaired to the supervisor. e. Visually inspect petroleum pipeline for abnormal operating characteristics, obvious damage, or flawed readings during normal operating limits. + 3. Service Support Section personnel conduct petroleum pipeline maintenance. a. Coordinate with platoon leaders for mission requirements as directed. b. Perform service and repairs required with appropriate tools, supplies, and test equipment. c. Ensure that the pipeline, pump stations, and all related equipment assigned to the platoon is properly adjusted, lubricated, cleaned, and serviced. d. Ensure to have adequate supplies to replace above ground joint of pipe, couplings, valves, and fitting to support mission IAW OPORD. e. Coordinate for external maintenance support from supporting maintenance or engineer company. f. Track maintenance repairs and support request IAW unit TSOP. g. Forward critical functional status reports to the Product Control Section or platoon leaders Section IAW TSOP. 4. Service Support Section personnel conduct pump station maintenance. a. Ensure the pump station(s) is shut down. b. Ensure to close the block valves on each side of break. c. Perform minor maintenance repairs which include repairing and replacing valves, blinds, pressure gages, meters, line strainers, pump units, welded pipelines, coupled lines, hose lines, and related pipeline equipment. d. Conduct preventive maintenance checks and services as required. e. Ensure adequate supplies are on hand for required maintenance repairs. f. Provide section NCO daily status of personnel, equipment, and section operations. g. Manage supplies in accordance with established supply regulations, and locally established plans and procedures. h. Order equipment replacement parts and other related pipeline equipment as necessary. + 5. Service Support Section personnel maintain valves in pipelines and terminals to control the flow of fuel. a. Ensure to never force a valve with a wrench. b. Open and close valves slowly to prevent damage. c. Make sure pump station operators know which valves are being opened or closed. d. Avoid interrupting pumping operations with maintenance operations. e. Periodically inspect the outside of the valves for dirt; clean as necessary. f. Inspect the outside of the valve for rust, corrosion, bare metal, or chipping paint but never paint the valve stems during repairs or maintenance. + 6. Service Support Section personnel observe fire and safety precautions while repairing leaks or breaks in military pipeline or pump stations. a. Keep all vehicles and unnecessary personnel a safe distance from a leak. b. Take caution and approach a leak from the windward side. c. Ensure to not approach a leak from a lower level; fuel vapors flow downhill.

m. Minimize fuel inhalation, prolonged skin contact, and persistent exposure to leaded gasoline to prevent potential dangerous health hazards.

+* 7. 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. Monitor before, during, and after preventive maintenance checks and services (PMCS) on organic equipment.

f. Employ Physical Security Measures.

g. Enforce operations security (OPSEC) procedures at all times.

h. Enforce safety regulations and established unit's internal and external TSOP's.

i. 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.

j. Direct destruction of unit equipment to prevent enemy use as situations dictate.

Task Performance Summary Block									
Training Unit			ITERATION						
			1		2		3		4
Date of Training pe	er Iteration:								
Day or Night T	raining:	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: Sometimes

MOPP 4 Statement: Chemical protective clothing ensemble and field protective mask restrict movement and activities. Wear MOPP gear only when threat forces have used CBRN weapons or are likely to do so. MOPP gear should be worn during CBRN training exercises. 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 in accordance with CBRN regulations.

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 moment, or Soldier duties as assigned.

Prerequisite Collective Task(s):

Ste Numl		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-CO-0209	Direct Petroleum Pipeline and Terminal Operating Operations	10 - Quartermaster (Collective)	Approved
	10-PLT-0202	Conduct Petroleum Pipeline Operating Platoon Operations	10 - Quartermaster (Collective)	Approved
	10-SEC-0221	Conduct Petroleum Pipeline 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
	052-248-1021 Identify Plumbing Materials 0		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-1024	Maintain the Fuel System on Construction Equipment	091 - Ordnance (Individual)	Approved
	101-92A-1008	Request an Item of Supply	101 - Quartermaster (Individual)	Approved

Supporting Drill(s): None

Supported AUTL/UJTL Task(s):

Task ID	Title
ART 4.1.7.3	Provide Technical Engineer Support
ART 4.1.7	Provide General Engineering Support
ART 4.1.1	Provide Field Maintenance Support
ART 4.1.3.3	Provide Petroleum, Oils, and Lubricants (Class III)

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.

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. 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. 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.