# **Training and Evaluation Outline Report**

### Status: Approved 29 Mar 2021 Effective Date: 29 Mar 2021

Task Number: 05-PLT-5310

Task Title: Prepare Pipeline Route Profile

# **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	Source Information
	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	
	ATP 5-19	RISK MANAGEMENT, with change 1 dated 8 Sep 2014	Yes	No	
	FM 5-482	MILITARY PETROLEUM PIPELINE SYSTEMS ( Rescinded, March 07, 2013)	Yes	No	

**Conditions:** The element is directed to prepare a pipeline route profile for its assigned sector as part of a pipeline installation project. Known pipeline trace end points are established. Higher headquarters (HQ) has provided a Tactical Standing Operating Procedure (TACSOP), order or directive with guidance regarding the lowest allowable pressure along the trace between pump stations, the maximum number of pump stations allowed, and detailed plans of the proposed pump station layouts. Geological terrain information, such as elevations, slopes, and type of vegetation, is provided. All personnel and equipment assigned by table of organization and equipment (TOE) are available. Security is provided by another unit.

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 element prepares a pipeline route profile; conducting a thorough reconnaissance of its designated sector and plots all information that is critical for determining the pipeline route and installation. The element calculates the degree of slopes, the amount of earth moving support required, the number of line/suspension systems, and the number and ideal locations of pump stations, in accordance with unit TACSOP, plans and directives; no later than the time specified in the directive.

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

Live Fire: No

# **Objective Task Evaluation Criteria Matrix:**

Plan	an	d Prepare		Ex	ec	ute			Ass	ess			
Operation Environme SQD & PLT	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			>=85%	>=80%	Yes	>=91%	All		>=90%	т	т		
Dynamic (Single Threat)		ΙΑΜ	75-84%	>=00%	35	80- 90%			All	All	All	All	80-
	Day	IAW unit CATS statement	65-74%	75-79%		65- 79%		89%	Ρ	Ρ			
Static (Single Threat)		nt.	60-64%	60-74%	No	51- 64%	- 411	. 70%	P-	Р-			
			<=59%	<=59%		<=50%	<all< td=""><td>&lt;=79%</td><td>U</td><td>U</td></all<>	<=79%	U	U			

Safety Risk: Low

**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 leader performs troop-leading procedures.			
+ 2. + The element performs a ground reconnaissance as time and the tactical situation permit.			
+ a. + Determines the ground distance of the route.			
+ b. + Determines route elevations.			
c. Notes the types of soil and terrain so that earth-moving and other route and site preparation activities can be planned.			
+ d. + Identifies major obstacles.			
(1) Identifies various pipeline crossing situations, such as elevated critical gap crossings, existing bridge crossings and road crossings.			
(a) Determines if an existing bridge or culvert can be used for the pipeline crossing.			
(b) Determines length of crossing site and type of crossing device if an existing bridge or culvert cannot be used.			
(2) Avoids main supply routes (MSR), congested and populated areas, marshes, swamps and land subjected to periodic flooding.			
+ e. + Identifies suitable pump-station locations.			
(1) Selects sites based upon hydraulic design of the pipeline.			
(2) Selects sites that are easily accessible.			
(3) Notes any construction work that must first be accomplished before setting up the pump station.			
+ f. Identifies locations for vent valves and check valves.			
g. Considers camouflage and security against tampering and sabotage.			
+ 3. + The element plots information obtained from the survey.			
+ a. Plots the ground distance to scale (1 inch equals 2 miles).			
+ b. Plots the elevation to scale (1 inch equals 200 feet).			
<ul> <li>+ c. Plots the recommended pipeline route (the shortest feasible route that stays within the constraints of the pump station and hydraulic design of the pipeline).</li> </ul>			
$\!$			
+* 4. + The element leader submits reports to higher headquarters (HQ) in accordance with unit standing operating procedure (SOP).			

Task Performance Summary Block											
Training Unit			ITERATION								
		1		2		3		4			
Date of Training p	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: 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
2.	05-CO-5001	Perform Project Management	05 - Engineers (Collective)	Approved
4.	05-CO-0018	Conduct Report Procedures	05 - Engineers (Collective)	Approved

# OPFOR Task(s):

Task Number	Title	Status
71-CO-8502	OPFOR Execute an Ambush	Approved
71-CO-8504	OPFOR Execute a Reconnaissance Attack	Approved

# Supporting Individual Task(s):

Step Nur	mber Task Number	Title	Proponent	Status
		Plan the Construction of Utility Systems for Non- Permanent Structures	052 - Engineer (Individual)	Approved
	052-120-5111	Develop Project Design Utilizing Standard Capability Tools	052 - Engineer (Individual)	Approved

### Supporting Drill(s): None

## Supported AUTL/UJTL Task(s):

Task ID	Title
ART 4.1.7.2.6	Construct Petroleum Distribution Systems

#### 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.

**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.