

Training and Evaluation Outline Report

Task Number: 71-8-5001

Task Title: Conduct Army Design Methodology (Bn – EAC)

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 Fort Leavenworth 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
	ADRP 3-0	Unified Land Operations	Yes	No
	ADRP 5-0	The Operations Process	Yes	No
	ATTP 5-0.1 (Superseded by FM 6-0, 5 MAY 2014)	Superseded by FM 6-0, 5 MAY 2014	Yes	Yes

Condition: The unit received an operations plan, or a warning, operations, or fragmentary order from higher headquarters, or a situational change requires the unit to frame or reframe the problem. The unit is exercising mission command. The commander's unit established communications with higher, subordinate and adjacent units and other unified action partners. The mission command system is operational, integrated with unified action partner systems, and processing information in accordance with standard operating procedures. Some iterations of this task should be performed in MOPP 4.

Standard: The commander and staff conduct the Army Design Methodology upon receipt or in anticipation of a mission. The commander and staff establish a planning or design team, prepare to conduct Army design methodology, frame the operational environment, frame the problem, develop an operational approach, and reframe the problem, as needed, in accordance with the operational timeline.

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.

Remarks: None

Notes: Note 1: Task content last updated: 12 June 2014.

Note 2: Army design methodology helps commanders understand their situation to include the problem, visualize a desired end state, and develop an operational approach to achieve that envisioned end state. Army design methodology tools and techniques are applicable to a wide range of commander and staff activities to include the military decisionmaking process, targeting, intelligence preparation of the battlefield, and assessment. The potential benefits for using Army design methodology include:

- Enhanced dialogue between commanders, staffs, and unified action partners.
- Deeper (and earlier) understanding of an operational environment.
- Better understanding of the problem and its root causes.
- Better guidance to drive detailed planning.
- Shared visualization of the purpose of the operation.
- Expanded role of the assessment process.

TASK STEPS

* 1. Upon receipt of mission or recognition of a situation requiring new planning, the commander, assisted by the staff, determines whether the situation and time available justifies conducting the Army design methodology, based on:

- a. What the unit knows about the operational environment, the problem, and the mission.
- b. Whether the problem and solution are self-evident.
- c. What the required end state entails.
- d. Whether there is a clear and evident course of action.
- e. Whether current actions are having unexpected or surprising effects.
- f. Whether actions that were previously effective are now falling short of desired impact.
- g. Whether the unit is familiar with other commanders, unified action (UA) partners, and higher headquarters (HQ), and their perspectives on the mission, the operational environment, and the problem frame.

* 2. The commander and staff initiate the following actions upon the commander's decision to conduct the Army design methodology:

- a. Alerts team members and others who will support Army design methodology.
- b. Develops a planning approach that either:
 - (1) Conducts Army design methodology before detailed planning begins; or
 - (2) Conducts Army design methodology in parallel with the military decisionmaking process (MDMP); or
 - (3) Embeds aspects of Army design methodology within Step 1 - Mission Analysis of MDMP; or
 - (4) Conducts Army design methodology after operations have begun.

c. Develops a timeline for the conduct of Army design methodology.

d. Determines the degree to which the commander will actively participate in Army design methodology, based on:

(1) The other requirements of command balanced against Army design methodology participation.

(2) The balance between spending too little time with the Army design methodology team resulting in inadequate understanding or guidance and spending too much time with the Army design methodology team dampening team member dialog.

3. The staff, with the commander's Army design methodology guidance, prepares to conduct Army design methodology, to include:

a. Designates 6 to 9 core Army design methodology team members and adjunct members, as needed.

Note: Army design methodology team members should have the following characteristics: An open mind for new ideas, an inquisitive mindset to include being curious and eager for knowledge, comfortable with ambiguity, critical thinking and creative thinking skills, listens to others and values differing points of view, takes and offers different perspectives, an investigative mindset and research skills, trained in Army design methodology, and the philosophy and theory that underpin it.

b. Assigns Army design methodology team members to the following roles:

- (1) Team leader.
- (2) Subject Matter Expert.
- (3) Red Teamer.
- (4) Knowledge manager/recorder.
- (5) Graphics developer.
- (6) Others, as needed.

c. Provides resources required by the Army design methodology team, to include some or all of the following as needed:

- (1) Workspace that facilitates collaboration and break-out work.
- (2) Networked computer(s) on appropriately classified network(s).
- (3) Maps & overlays.
- (4) Recorder materials (notepads, writing implements, camera, audio recorder).
- (5) Visual aid materials (whiteboards, butcher block paper, drawing tools, post-it notes, projectors).
- (6) Video teleconference or other network collaboration means.

* 4. The commander and Army design methodology team frames the operational environment (OE):

a. Establishes contextual understanding of the OE.

- (1) Reviews and resolves contradictory or ambiguous guidance and direction from sources such as:
 - (a) Higher HQ plans and orders.
 - (b) Verbal guidance from the higher HQ.
 - (c) Policy documents.
 - (d) International mandates.
 - (e) Other products that influence the OE.
- (2) The commander and Army design methodology team, as necessary or as required:
 - (a) Identifies operationally relevant current OE conditions and mission variables.
 - (b) Identifies and analyzes Centers of Gravity (COG).

(c) Describes how current conditions came to be from a historical and cultural perspective.

(d) Describes how current conditions interrelate and influence each other.

(e) Describes current trends based on historic OE tendencies.

(f) Describes realistic alternative future states of relevant actors.

b. Defines a desired end state, to include:

(1) Conditions that, if achieved, will meet the objectives of higher HQ orders, guidance, and policy.

(2) Identifies time considerations for establishing end state conditions.

c. Creates a narrative describing the environmental frame.

d. Creates a visual portrayal of the environmental frame.

* 5. The commander and Army design methodology team frames the problem:

a. Describes the difference between current OE and desired end state conditions.

b. Identifies conditions that need to change.

c. Identifies conditions that do not need to change.

d. Describes obstacles in any of the operational variables which might impede reaching the desired end state:

(1) Political.

(2) Military.

(3) Economic.

(4) Social.

(5) Information.

(6) Infrastructure.

(7) Physical environment.

(8) Time.

e. Describes why obstacles exist and their relationships to each other and conditions in the environmental frame.

f. Identifies threats.

g. Identifies opportunities.

h. Creates a narrative that describes the set of interrelated problems.

i. Creates a visual portrayal of the problem frame.

j. Updates the environmental frame narrative and visual portrayal based on new insights discovered while framing the problem.

k. Writes a problem statement.

(1) Determines the root causes of the conflict.

(2) Describes the issues that are impeding attainment of the end state that the operational approach must resolve.

(3) Accounts for time and space.

* 6. The commander and Army design methodology team may also develop an operational approach, as necessary or as required:

a. Identifies decisive points.

b. Determines whether to take a direct or indirect approach considering such factors as:

(1) COG analysis.

(2) Defeat mechanisms, such as destroy, defeat, disintegrate, and/or isolate.

(3) Stability mechanisms, such as compel, control, influence, and/or support.

c. Establishes objectives.

d. Devises lines of operation and lines of effort to link objectives in time, space, and purpose.

e. Refines the operational approach:

(1) Describes the commander's visualization in time, space, and purpose.

(2) Describes:

(a) Tempo.

(b) Phasing and transition.

(3) Describes resources required to execute the approach.

(4) Identifies risk:

(a) Communicates risk to higher HQ.

(b) Writes risk mitigation guidance to be used in the commander's planning guidance during MDMP for course of action development.

f. Creates a narrative operational approach that describes the broad actions the unit must take to transform current conditions into those desired at end state.

g. Creates a visual portrayal of the operational approach.

h. Updates the environmental and problem frame narratives and visual portrayals based on new insights discovered while developing the operational approach.

* 7. The commander develops the initial commander's intent as part of the Army design methodology that describes:

Note: The commander's intent is a clear and concise expression of the purpose of the operation and the desired military end state that supports mission command, provides focus to the staff, and helps subordinate and supporting commanders act to achieve the commander's desired results without further orders, even when the operation does not unfold as planned. (JP 3-0)

a. Success for the operation.

b. The operation's purpose.

c. Key tasks.

d. Conditions that define the end state.

8. Upon the commander's approval, the Army design methodology team publishes Army design methodology products, consisting of key outputs of Army design methodology conveyed in text and graphics, to higher HQ, planning staff, subordinates, flank units, supporting units, UA partners, and others as appropriate, to include:

Note: Army design methodology products are designed and produced in accordance with the commander's guidance, the unit's planning SOP, the current OE/situation, and doctrine.

a. Description of the OE / environmental frame.

b. Description of the problem / problem frame.

c. Description of the operational approach and the commander's planning guidance.

d. Description of risk guidance.

* 9. The commander and Army design methodology team monitors then assesses the operation for opportunities or requirements to reconsider the operational approach, to include but not limited to:

a. Inadequate progress towards achieving objectives.

b. Assumptions in the environmental or problem frames are invalidated.

c. Unforeseen success presents opportunity.

d. Unforeseen failure requires mitigation.

e. A major event that substantially changes the operational environment.

f. A change in available resources for the operation.

g. A change in higher HQ's mission or end state.

* 10. The commander determines whether the end state can still be achieved using the current plan (including its branches and sequels) by reviewing earlier hypotheses, conclusions, and decisions that underpin the operational approach.

* 11. The commander and Army design methodology team revises the operational approach when required by:

- a. Reframes the OE.
- b. Updates environmental frame products.
- c. Reframes the problem.
- d. Updates problem frame products.
- e. Develops a revised or new operational approach and intent.
- f. Publishes revised Army design methodology products.

(Asterisks indicates a leader performance step.)

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Upon receipt of mission or recognition of a situation requiring new planning, the commander, assisted by the staff, determined whether the situation and time available justified conducting the Army Design Methodology.			
2. The commander and staff initiated the following actions upon the commander's decision to conduct the Army Design Methodology:			
a. Alerted team members and others who supported Army Design Methodology.			
b. Developed a planning approach.			
c. Developed a timeline for the conduct of Army Design Methodology.			
d. Determined the degree to which the commander actively participated in Army Design Methodology.			
3. The staff, with the commander's Army Design Methodology guidance, prepared to conduct Army Design Methodology.			
4. The commander and Army Design Methodology team framed the operational environment (OE).			
5. The commander and Army Design Methodology team framed the problem.			
6. The commander and Army Design Methodology team developed an operational approach, as necessary or as required.			
7. The commander developed the initial commander's intent as part of the Army Design Methodology.			
8. Upon the commander's approval, the Army Design Methodology team published Army Design Methodology products, which consisted of key outputs of Army Design Methodology conveyed in text and graphics, to higher HQ, planning staff, subordinates, flank units, supporting units, UA partners, and others as appropriate.			
9. The commander and Army Design Methodology team monitored then assessed the operation for opportunities or requirements to reconsider the operational approach.			
10. The commander determined whether the end state could still be achieved using the current plan (including its branches and sequels) by reviewing earlier hypotheses, conclusions, and decisions that underpinned the operational approach.			
11. The commander and Army Design Methodology team revised the operational approach when required.			

Step ID	TADSS ID	Title	Product Type	Quantity
	71-20	Common Hardware Platform (CHP)	DVC	1
	71-30	Joint Land Component Constructive Training Capability (JLCCTC) Objective System	DVC	1
	71-ALOTT	Army Low Overhead Training Toolkit	SIM	1

Equipment (LIN)

Step ID	LIN	Nomenclature	Qty
No equipment specified			

Materiel Items (NSN)

Step ID	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 FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. .

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. .