



CHENNAULT EVENT 6: JOINT ALL DOMAIN OPERATIONS: MISSION TYPE ORDER AFTER ACTION REPORT

Mission Type Orders that best enable the effective integration of effects across all domains in joint operations.

Abstract

This event explored the Mission Type Order possibilities that might improve joint all domain operations. The participants designed two prototypes for further analysis and testing that have potential for improvement

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INTRODUCTION

Chennault 6, continued the series with the joint all domain operations (JADO) team exploring Mission Type Order (MTO) structures that have potential to better enable JADO. The thought being that the current Air Operations Directive and Air Tasking Order designs are insufficient to meet the demands of today's information rich warfighting environment. Like the previous event, the team also employed the Stanford Design Thinking Process to design prototypes that enabled JADO via retooled MTO structures.

Event 6 continued in the same format as the previous event.¹ The first event, held in December 2019, sought to identify seams and shortfalls between current Air Force doctrine and the doctrine required for highly-integrated, effective JADO. The second event explored the doctrinal changes needed to better execute JADO targeting. Event 3 focused on identifying doctrine changes needed to improve the integration of cyberspace capabilities into air operations. Event 4 was held in August 2020 at the Curtis E. LeMay Center for Doctrine Development and Education, Maxwell AFB, and at distributed sites across the Air Force employing the Stanford Design Thinking Model² to begin the creation of a viable integrated tasking order. Event 5 was held 5-8 October, also in a distributed manner. The Doctrine Directorate of the LeMay Center was the event sponsor. The Chennault 6 event, sponsored for the first time by the LeMay Center Strategy and Concepts Directorate, utilized the 'MIRO' collaboration tool as provided by MGMWERX. This event was conducted 7-10 December 2020 and due to ongoing Coronavirus concerns in the Air Force, most of the participants contributed via voice and chat on the Commercial Virtual Remote (CVR) Environment³. The discussions were held at the unclassified level.

¹This is the sixth of a series of scheduled events that explore doctrinal changes needed to fully implement JADO in Air Force and joint operations. Contact Mr. Allen Moore, Curtis E. LeMay Center for Doctrine Development and Education, Air Force Lessons Learned Directorate, ivan.moore.4@us.af.mil to request the AARs for the first four events.

² See the Chennault Event 4 After Action Report for a thorough description of the Stanford Design Thinking Model.

³The Department of Defense created the Commercial Virtual Remote (CVR) Environment to support the Department's move towards a large-scale telework posture in response to the COVID-19 national emergency. This new tool provides the DoD with enhanced collaboration capabilities for DoD teleworkers to facilitate continuity of operations throughout the duration of the emergency. The CVR Environment provides a central place for unclassified virtual collaboration. Capabilities include: Chat, Video, Virtual Meetings, Screen Share, Document Collaboration and Storage.

The event participants worked as one on day one, then separately in two different virtual rooms the following day, coming together to receive guidance and to brief their prototype designs to the entire team. Each group was asked ‘what information is required for an effective MTO?’ The initial results were two different MTO prototypes for consideration to employ JADO. In the end, a Hybrid Prototype was developed to go forward into the next Chennault event.



CHENNAULT EVENT 6 PROBLEM STATEMENT

OPERATIONS ORDER TEMPLATE

Event Problem Statement:

What information is required for an effective MTO?

What are the required elements (common SMEAC)?

What traditional MTO information is not applicable to DAF missions?

What preplanned decisions and emergent situations need to be addressed in MTO?

The groups went with the following:

SAMPLE 5 PARAGRAPH OPERATION ORDER

1. Situation

- a) Enemy Forces
 - 1) Situation (enemy, weather and terrain).
 - 2) Capabilities.
 - 3) Probable course of action.
- b) Friendly Forces.
 - 1) Mission of Next higher unit.
 - 2) Mission of adjacent units (left, right, front, rear).
 - 3) Mission and location of supporting elements.
- c) Attachments and Detachments.

2. Mission, Who, What, When, Why and Where (coordinates).

3. Execution.

- a) Concept of Operation.
 - 1) Scheme of maneuver.
 - 2) Formation.
 - 3) Route.
 - 4) Tactical Missions to subordinate Units.
- b) Subunit Subparagraphs.
- c) Coordinating Instructions.

4. Service Support.

a) Supply.

- 1) Rations.
- 2) Uniforms and Equipment.
- 3) Arms and Ammunition.
- 4) Captured Materiel.

b) Transportation.

c) Medical Evacuation.

d) Personnel.

e) Prisoners of War.

5. Command and Signal.

a) Signal.

- 1) Frequencies and Call Signs.
- 2) Pyrotechnics and Signals.
- 3) Challenge and Password.
- 4) Code Words.

b) Command.

- 1) Command Leader Location.

2) Chain of Command.



MISSION TYPE ORDER DESIGN

PROTOTYPE #1

Governance:

- MTO is issued every 24 hours
- Each MTO has 3-5 days worth of MSNs

Assumptions:

- Lower echelon has some limited targetteering capability

1. Situation

- Enemy Forces
 - Situation (enemy, weather, terrain)
 - Capabilities
 - Probable course of action
 - Most Dangerous course of action
- Friendly Forces
 - Mission of next higher unit
 - Mission of adjacent units (left, right, front, rear)
 - Mission and location of supporting elements
- Attachments and Detachments

2. Commander's Intent

- End State
- Purpose

3. Execution

- Concepts of Operation (Joint Functions)
 - ITO: C2 for MTO (ID ADOC), ADA, AADC
 - INFO: PACE, CoP (Friend & enemy ord batt)
 - INTEL: sensing grid, MLCOA, MDCOA, risk analysis
 - Maneuver: steerpoint, waypoints, decision points, scheme of maneuver, Airspace Coordination Measures
 - Protection: DCA of assigned area, Joint base defense
 - Sustainment: Tanker, airlift
 - Fires: generation of DPis, push JIPTL to WOC, re-attacks authorized, Tgt Nom Lists if JIPTL exhausted, DT/TST Matrices with Authorities/Conditions
 - Bomb Hit Assessment
- Subunit Subparagraphs
- Dependencies
 - Support / Effects being provided to support your Objective / Task
 - Timing / Tempo in D-DIL
 - Assessment / Integration (i.e., is it time based? Action required? How will I know if this is happening as planned?)
 - Support / Effects you are providing to support others
 - Prioritization of external support to internal Objs/Tasks
 - Timing / Tempo in D-DIL

4. Sustainment

- Agile Combat Employment concepts
 - Intertheater airlift / sustainment held at Op C2 node
 - Cluster sustainment managed by AEW (etc.)
 - IAW AOD, TPFDD emphasizing sortie generation

Figure 1: Prototype #1

- 5. **Command & Signals**
 - a. **Signals**
 - i. **Frequencies and call signs**
 - ii. **Pyrotechnics and signals**
 - iii. **Challenge and password**
 - iv. **Code words**
 - b. **Command**
 - i. **Command leader location**
 - ii. **Chain of command**
 - c. **Authorities**
 - i. **Coordinating instructions with supported/supporting forces**
 - ii. **Conditions Based Authorities: Tgt engagement authority, Msn Approval, NK**
 - ID Authority**
 - Engagement**
 - Commit**
 - Tasking**
 - Retasking C2**
 - Scramble (DCA)**
 - Scramble (GINT)**
 - Scramble (PR)**
 - Scramble (GAR)**
 - Rolex**
 - CAP Mgt**
 - Tanker Mgt**
 - HVAA / GIISR Authorities**

Figure 2: Prototype #1 (continued)



MISSION TYPE ORDER DESIGN

PROTOTYPE #2

1. **Situation**
 - a. **Enemy Forces**
 - i. Situation (enemy, weather, terrain)
 - ii. Capabilities
 - iii. Probable course of action
 - b. **Friendly Forces**
 - i. Assigned units under MTO
 - ii. Op Assessment Feedback Loop to Warfighter
 - iii. Mission of next higher unit (MTO Period)
 - iv. Mission of adjacent units (left, right, front, rear) (MTO Period)
 - v. Mission and location of supporting elements (MTO Period)
 - c. **Attachments and Detachments**
2. **Mission (Who, What, When, Why, Where)**
 - a. **Commander's Intent**
 - b. **When to start/stop execution of MTO**
 - i. **Decision points**
3. **Execution**
 - a. **Concepts of Operation**
 - i. **Scheme of maneuver (campaign plan, JAOP, PATS, etc.)**
 - MTO-specific phasing deviations
 - MTO-specific Weights of Effort
 - Operational Objective Priority Deviations
 - Unit-specific tasking/Assignments/Guidance
 - Deviations to existing plans (NKO, AOD, JAOP, OPLAN, etc.)
 - ii. **Formation**
 - **Force Packaging (Strike, PR, NKO, IAMD)**
 - iii. **Route**
 - **MTO-specific changes to Area of Responsibility (e.g. BMA)**
 - **Tactical Missions to subordinate units**
 - **Domain/Mission Area Synchronization**
 - b. **Sub-unit Sub-paragraphs**
 - c. **Coordinating Instructions (unit, domains, and msn synchronization)**
 - **SPINS Deviations for this MTO**
 - d. **Risk Assessment**

Figure 3: Prototype #2

4. Sustainment

- a. Responsibilities of ACE Hub or Msn/CC
- b. Fuel (Storage, sustainment, Air Refueling, priorities)
- c. MTO-Specific Deviations to airlift
 - MTO-specific Transportation/Airlift coordination w/ TRANSCOM)
 - MTO-specific support requirements (e.g fuel and bombs to location "X")
- d. Medical Evacuation
- e. Personnel
- f. Current suitable recovery airfield options

5. Command and Control (C2) and Communications

a. Command and Control

i. Command leader location

ii. Chain of command

- Supported/supporting relationships

iii. Authorities

- Devolution of Command Authority
- Granted Coordination Authorities (e.g. Joint Target Coordination Authority) / DIRLAUTH deviations
- Delegation of Specific Authorities (e.g. AADC)
- Authorities not delegated

b. Communication

i. PACE Plan

ii. SPINS Deviations for this MTO

iii. Challenge and password

iv. Code words

v. Management of datalink architecture/frequency allocation (C2)

- Coordination instructions (Rebuilding SA when reconnected)

iv. AADC and Weapon Control Status Updates (C2)

Figure 4: Prototype #2 (continued)



Way Ahead

Chennault 6 identified many issues that need to be addressed during TTX 6.5. To name a few:

What already exists in Operational Plans? What, if anything needs to be duplicated? What needs to be highlighted as modified?

What is already included in one of the current MTOs published by Air Components (AOD)? What modifications are required?

What information is currently included in the Air Tasking Order (ATO) that needs to be in this new MTO?

What resources/processes/command relationships must we establish to enable synchronization of all-domain operations?

The prototypes created will require further testing and modification. They will have to be handed off to an organization better able to further development and convert the concept from prototype to a real system, perhaps as the team suggested...the Shadow OC. Without agreed upon Terms of Reference and at least some skeleton Command Relationships agreed upon by current Combatant Commanders, further efforts may fall short of acceptable solutions to all-domain integration effort.