CHENNAULT EVENT #5, JOINT ALL DOMAIN OPERATIONS: COMMAND RELATIONSHIPS AFTER ACTION REPORT

Command relationships that best enable the effective integration of effects across all domains in joint operations.

Abstract

This event explored the command relationship possibilities that might improve joint all domain operations. The participants designed four prototypes for further analysis and testing that have potential for improvement

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Executive Summary

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Chennault 5 continued on the path of its predecessor, Chennault 4. However, this time the joint all domain operations (JADO) team decided to design new command relationship (COMREL) structures that have potential to better enable JADO than the current design. Like the previous event, the team also employed the Stanford Design Thinking Process to design prototypes that enabled JADO via a new and different COMREL structure. However, for this event the process was modified to better enable the participants to develop the prototypes within the necessary time period.

Event 5 continued in the same format as the previous event. 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 employed the Stanford Design Thinking Model to begin the creation of a viable integrated tasking order. This Event 5 was held 5-8 October, also in a distributed manner. The Doctrine Directorate of the LeMay Center was the event sponsor. Due to ongoing Coronavirus concerns in the Air Force, most of the participants contributed via voice and chat on the Commercial Virtual Remote (CVR) Environment. The discussions were held at the unclassified level.

The event participants worked separately in four different CVR rooms, only coming together to receive guidance and to brief their prototype designs to the entire team. Each group was asked a series of questions designed to get them to empathize with future commanders and consider COMREL possibilities well beyond what is currently employed. As the event progressed, the teams shifted to a more organizational-structure focus to address COMREL. Therefore, the resulting prototypes reflect primarily organizational-structure changes with a strategic-level view of the respective COMREL to employ JADO.

PROTOTYPE #1: ENDER'S COMREL DESIGN

Group 1 decided to take a strategic view of the problem. They adopted a design first developed in the Doolittle 2018 Wargame, held at the Curtis E. LeMay Center Wargame Institute in the Fall of 2018. This design is not currently legal to incorporate. It would require a repeal of the 1987 Goldwater-Nichols Act. Not content with one design, Group 1 envisioned four possible different courses of action (COAs). All employ a global commander but the structures vary. In the first COA, the group created standing commands, campaign commands and regional commands, all reporting to the global commanded (currently the CJCS). The standing commands are assigned all the combat forces in accordance with the domain they operate in. In the second COA, the standing commands are replaced with a reincarnation of US Joint Forces Command replacing the the standing commands. In the third COA, the structure returns to the first COA but the standing commands are all O-9 level billets while the regional commands are O-10 level billets. This is areversal of the first COA. In the last COA, the global commander goes away and the SECDEF serves in that role. All have their advantages and disadvantages.

PROTOTYPE #2: ORGANIZATION BY LINE OF EFFORT

Group 2 created a prototype that designed task forces that are based on lines of effort. Forces and authorities are provided based on the assigned effort. These task forces are built on four pillars. The first is the Advanced Battle Management System which should ensure ubiquitous and common command, control, communications, computers and ISR. The second pillar is the All Domain Operations Capability which is the command vehicle by which forces are assigned and allocated to individual task forces organized around lines of efforts to support the Joint Force Commander's objectives. The third pillar is strong, well-trained leadership, not just at the general officer level but all the way down to the junior officer or non-commissioned officer warrior. The last pillar is clear, simple and direct mission command orders. In this prototype, there are no component commanders.

PROTOTYPE #3: PROBLEM-CENTRIC C2

Group 3 designed a prototype that envisioned, like Group 1, a global combatant commander with an associated ADOC directing the standup of a joint task force. This design also requires a new Goldwater-Nichols Act of Congress. The force is not limited in the traditional sense but is instead problem-centric. It is assigned a mission and it executes that mission without respect for domains, areas of responsibilities or joint operating areas. The task force could be global in scale.

PROTOTYPE #4: MISSION-ORIENTED C2

Group 4 attacked the COMREL problem by developing task forces with pre-packaged COMREL and all domain assets and associated support necessary for the accomplishment of particular problem set. The problem would be bounded by the commander (physical, cognitive, temporal boundaries). Appropriate authorities would be delegated to the task force commander, who via the task force's ADOC, enabled by AI and JADO tools, direct the forces within the commander's span of control.



INTRODUCTION

Chennault 5, as with the previous event, employed a version of the Stanford Design Thinking Process to pursue the command relationships necessary to enable joint all domain operations (JADO) both within a theater of operations and globally.

Event 5 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, held in February 2020, explored the doctrinal changes needed to better execute JADO targeting. Event 3, held in June 2020, 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 employed the Stanford Design Thinking Model to begin the creation of a viable integrated tasking order. This Event 5 was held 5-8 October, also in a distributed manner. The Doctrine Directorate of the LeMay Center was the sponsor for the event. Due to ongoing Coronavirus concerns in the Air Force, most of the participants contributed via voice and chat on the Commercial Virtual Remote (CVR) Environment². The discussions were held at the unclassified level.

The Chennault Event 5, JADO: COMREL objective was to design new COMREL structures that best enabled the joint force to execute JADO. First used in Event 4, the Chennault participants again employed the Stanford Design Thinking Process.³ However, this time the process was modified to better assist the participants to build the desired prototypes.

³See the AAR for Event 4 for a more thorough description of the Stanford Design Thinking Process.

¹This is the fifth 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, <u>ivan.moore.4@us.af.mil</u> to request the AARs for the first four events.

²The 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 participants were not asked to assess the quality of current COMREL in employing JADO. Instead they were asked a series of questions across the first day and a half of the event designed to get them to think about alternatives. This is the empathy and define phase of the process. Afterwards, the participants designed prototypes based on the discussions that had occurred. Those were further constrained by further questions that asked the participants to envision the application of the prototypes in potential real world situations. Afterwards the prototypes were refined as necessary.

The event lasted four days and the participants worked separately in four different CVR rooms, only coming together to receive guidance and to brief their prototype designs to the entire team. As the event progressed, the teams shifted to a more organizational-structure focus to address COMREL. Therefore, the resulting prototypes reflect primarily organizational-structure changes with a strategic-level view of the respective COMREL to employ JADO.

SOME THOUGHTS ABOUT JOINT ALL DOMAIN COMMAND AND CONTROL

The Department of Defense (DOD) has provided a vision for JADC2.⁴ It also provided a definition which is marked CONTROLLED UNCLASSIFIED INFORMATION (CUI) and is not included in this paper. In the vision, the DOD describes some non-material attributes JADC2 must have. They include organization change since our current mandated organizations have the DOD segregated by domain; a direct, on-demand global communications network; information accessible at speed and scale to enable decision-making; decentralized command and control empowered with associated actions and risks to enable the generation of effects unhindered by a communications-denied/degraded environment, decentralized execution where subordinate commanders are empowered to execute to meet the commander's intent and an "operationalized, non-physical battlespace." All these attributes are needed for the joint force to deliver a convergence of effects to be decisive. While the battlespace with a peer competitor is global in scale, it is still necessary, indeed vital, to be able to deliver combat capabilities across all the domains that converge at a point in space. Massing of force still matters on the battlefield, no matter in which domains they are delivered from or to. Also important is to understand that the convergence of forces across multiple domains in an integrated and synchronized manner has a multiplier effect that significantly exceeds what can be done within the domain lanes. Against a near-peer adversary, both today and in the future, the DOD must deliver force in this manner at the operational and tactical levels of war to generate the strategic effects desired.

⁴Joint All Domain Command and Control Vision, version 0.6, CUI, unsigned and undated.



STANFORD DESIGN THINKING PROCESS:

EMPATHY AND DEFINE PHASES

The COMREL team, separated into four stand-alone virtual rooms, brainstormed on possible COMREL structures and processes that could enable JADO. They were aided by a series of questions provided by the facilitators. These questions were:

- 1. How do we get forces across all domains to create convergence through synchronization leveraging applicable command relationships?
- 2. In the absence of unity of command how do we obtain unity of effort across all domains?
- 3. What specific authorities do mission commanders need during periods of degraded communications?
- 4. Explain a situation where a commander did not have the appropriate authorities to accomplish his/her mission?
- 5. Explain a situation where forces and/or authorities would need to be transferred from one mission task force to another in near real time (insufficient to get the joint force commander approval)?
- 6. What are the limitations (time/delegation required/etc.) of the current process to rapidly transfer multi-domain capabilities/assets/weapons between a joint task force or combatant command?
- 7. Is rapidly transferring forces or authorities for specific missions a planning or operational issue during periods of normal communications?
- 8. Is rapidly transferring forces or authorities for specific missions a planning or operational issue during periods of degraded communications?
- 9. In what situations are specified Supporting/Supported relationships insufficient?
- 10. Explain a situation where "other" domain capabilities were not available specifically because of insufficient authorities?

- 11. What factors shape our current command and control practices, and which will still hold in a future contested near-peer fight?
- 12. Who is in the best position to determine which "best target-best capability" combination should be used against which enemy target?
- 13. Who is in the best position to determine Operational Gains Lost, Intel Gains Lost, and Capabilities Gains Lost to approve the mission risk acceptance?
- 14. Does the tactical situation in a single moment in time outweigh the operational or strategic objective?
- 15. How are subordinate commanders made aware of long-term sustainment risk for use in their tactical evaluations of resource usage? How do we avoid commanders employing every available capability while leaving others to deal with the consequences?
- 16. How do we ensure mission commanders have the requisite knowledge, personally or on staff, to understand and efficiently employ disparate capabilities for synchronized effects / convergence?
- 17. What foundational blocks are required to enable right perspectives and expertise to make difficult decisions about objectives, resources, and risks with the varied array of all-domain capabilities?
- 18. What foundational blocks are required to enable right perspectives for decision-making and proper employment of all-domain capabilities by mission commanders?
- 19. How will delegated authorities work in coalition/alliance warfare where sovereign security/political issues can affect a commander's control over allied forces?

The good news for our country is that the US military, if it needed to fight a near-peer adversary, would likely be doing it thousands of miles from the CONUS and even from its closest territories. The bad news is that the US military has to be able to project forces thousands of miles, maybe over open water, to generate a convergence of effects against a peer who likely has similar capabilities. That means that a commander is likely facing a number of hurdles, to include limited resources in the theater, long vulnerable lines of communication (LOCs), possible operational and strategic actions by the adversary outside the theater, an impressive adversary defense structure, robust global intelligence, surveillance and reconnaissance (ISR) and an all domain C2 capability to deliver synchronized effects.

Depressing? Maybe, but note that the United States military has significant capability all its own, able to deliver first rate combat capabilities across the air, land, sea and information domains. Because LOCs are stretched thousands of miles over open water, these first rate capabilities will be limited in numbers. Communications are similarly vulnerable.

Overwhelming the adversary with sheer numbers is not a realistic course of action (COA). Instead the US must generate combat power from all the domains to converge at a single point in time and space to deliver the most effects possible. Domain superiority, even if temporal, must occur and capabilities across all domains must be in an appropriate place to take advantage of that superiority. This will need to occur multiple times. The amount of resources on hand will likely be the limiting factor. Economists would describe the problem for the joint force commander as getting the most bang for our buck.

But that's not all. The US military must be able to execute a global strategy that takes into account other potential adversaries, homeland defense and the near-peer adversary's capability and willingness to deliver combat effects on a global scale in all domains. These facts force the joint force commander(s) to exercise authorities and responsibilities both in the theater and around the globe. These authorities must transcend all domains. And to deal with the resource limitations that a global fight entail, all combat effects from all domains must be integrated to converge as necessary to meet the commander(s) intent.

So what COMREL is best to enable the US military to generate and deliver effects from all domains against all domains globally to converge to generate mass against an adversary? That's the problem these questions are designed to generate empathy for. These questions aided the participants' ability to empathize with the warriors and commanders. That empathy helped the participants design and further define four COMREL prototypes.



STANFORD DESIGN THINKING PROCESS: PROTOTYPE #1: ENDER'S COMREL DESIGN

Group 1 decided to take a strategic view of the problem. They adopted a design first developed in the **Doolittle 2018 Wargame**, held at the Curtis E. LeMay Center Wargame Institute in the Fall of 2018. This design is not currently legal to incorporate. It would require a repeal of the 1987 Goldwater-Nichols Act. Not content with one design, Group 1 envisioned four possible different courses of action (COAs). All employ a global commander but the structures vary.

Doolittle 18 proposed the structure in Figure 1 to solve some of the problems associated with global coordination, joint synchronization, and traditional operate, train and equip (OT&E) functions. This model was adopted by Group 1 as a baseline for discussions on a proposed Goldwater-Nichols revision.

Ender's design has the following advantages: it is structured to enable unity of command on a global scale. It also enables commanders to have a global focus and reach by weakening the regional seams that currently exist.

The Services would perform their traditional OT&E functions. Once personnel were mission qualified, or a new unit reached initial operations capability (IOC) they would be handed over to the standing commands. There would be no service-retained or regionally-assigned combat forces. Only what is currently called "Institutional Forces" would be assigned to the Services. Forces will be postured around the globe as required, but under this construct it is presumed they would still be assigned to the standing commands. The standing commands would exercise with each other and with partner nations. Their primary objective is to maintain force readiness and insure that the forces from each domain are capable of full integration in combat.

The campaign commanders are presumed to operate in war time. It is currently unclear what their peacetime role would be other than to prepare to be assigned a mission. It is possible they would be given a compete role against a specific adversary.

COA 1: ENDER'S DOOLITTLE 18 COMREL DESIGN



Figure 1: Group 1 COA 1: Ender's Doolittle 18 COMREL Design – Note: This design was created before Congress stood up the Space Force

Disadvantages of the Ender Design include the following: the design is perceived to weaken civilian control of the military due to the global military commander. Also regional commanders who are responsible for security cooperation and building partnerships with allies lack status. In this design they are Lieutenant Generals or Vice Admirals. It is unclear where coalition forces would attach or align themselves. The Services would perform their traditional OT&E function before handing the forces over to the appropriate standing command (neither Doolittle 18 or Group 1 tried to more closely define what forces would be held by which standing command). The standing commanders serve as force providers and integrators. As mentioned above, it is unclear what role campaign commanders would have in peacetime. In this design there is no strong tie between force responsibility and force accountability. In other words, when forces are assigned to the other commands and no longer tied to the Services, the commands will have total

control over them (ADCON, OPCON and TACON). Without service components under the standing commands, it is unclear how the forces would be managed. Also, it is unproven that a single commander can effectively command forces globally. The campaign commanders will assist but the allocation of forces will come from the Global Commander.

COA 2: THE RETURN OF USJFCOM

Group 1 generated a second COA by reviving a long dead combatant command, US Joint Forces Command (USJFCOM). As in COA 1, the Services report directly to the SECDEF. The Global Commander has no direct role in the OT&E of forces. The commander's purpose is to be a warfighter.

USJFCOM's role matches the role it had when it existed, to provide combat-ready forces to the campaign commanders. Notice that in both this COA and COA 1 the joint staff as it has traditionally existed is gone. Those roles are now played by the OSD staff.



Figure 2: Group 1 COA 2: Ender's Doolittle 18 COMREL Design with USJFCOM

COA 3: THE RISE OF THE REGIONAL COMMANDERS

In this COA, the Standing Commanders are Lieutenant Generals/Vice Admirals while the Regional Commanders are Generals and Admirals. This reduces the concern with partner building but creates an atmosphere for possible Service parochialism in the Standing Commands.





COA 4: THE SECDEF VERSION



SECDEF Version

This COA envisions the SECDEF in a more prominent role, performing many functions currently performed by the joint staff for the Chairman. The SECDEF is essentially the Global Commander. The joint chiefs in this COA are truly joint, with no chairman, able to act in an advisory role for the SECDEF and President. However, this COA probably reduces effective global integration because there is no one commander in charge. There is also no one except the SECDEF to arbitrate disagreements between the commanders. OSD staff functions would likely have to evolve. This COA gives the Campaign Commanders a lot of power. It also makes responding to emerging threats problematic.



STANFORD DESIGN THINKING PROCESS

PROTOTYPE #2: ORGANIZATION BY LINE OF EFFORT

This prototype does not require any actions by Congress as it employs authorities already available. The joint forces are organized to accomplish the joint force commander's lines of efforts that enable the achievement of the commander's objectives.



COGs

This concept assumes that the current COMREL organization structure is too parochial, inefficient and vulnerable to effectively command joint forces in a near peer fight of the future. It assumes a 3-5 year time span to implement changes and that the joint staff and OSD are willing to make difficult choices to rapidly modernize and reorganize into a more capable and lethal joint force.

In Figure 5, the pillars represent the four enabling pillars of JADO. The first is the Advanced Battle Management System (ABMS) which should ensure ubiquitous and common command, control, communications, computers and ISR. The second pillar is the All Domain Operations

Capability (ADOC) which is the command vehicle by which forces are assigned and allocated to individual task forces organized around lines of efforts (LOEs) to support the Joint Force Commander's objectives. The third pillar is strong, well-trained leadership, not just at the general officer level but all the way down to the junior officer or non-commissioned officer warrior. The last pillar is clear, simple and direct mission command orders. In a dynamic and far-reaching near peer competition complex directives will not survive first contact with the enemy. The fog and friction of modern warfare will increase, not decrease, despite the addition of new technologies. Clear and simple mission command orders promulgated across the chain of command are essential to enable unity of effort until unity of command is restored.

Each task force is assigned a specific LOE to achieve based on a plan, threat, operating environment, time or phase of conflict. The commanders are chosen by the service component with the preponderance of capability and forces required to accomplish their particular LOE. The task forces can be permanent or temporary. Notice that there is no longer an air, land or maritime component commander.



Figure 6: Organize by LOE example

Figure 6 demonstrates how the forces might be employed. It is clear that the joint force commander will often have to establish supported/supporting relationships between the LOEs. Group 2 asked itself how these task forces could be controlled. This is where the ADOC plays a major role. Under their design the combatant commander would have an ADOC assigned that exercises operational control (OPCON) over the multiple LOE task forces. Also within each task force, an ADOC exists which exercises operational control to the forces apportioned to it by the combatant commander. Below the ADOC resides multiple domain – battle management teams (M-BMTs). These teams exercise tactical control (TACON) over their apportioned forces.



Figure 7: LOE Task Force C2 Structure – Modern JADO Battle Management Network

The Group expects this design to exhibit robustness and resiliency attributes. It is a homogenous mesh network that stands in marked difference from the current legacy heterogeneous network.

To generate all domain effects it is necessary for the C2 structures to have all domain subject matter experts. See Figure 8 for Group 2's vision for ADOC and M-BMT structures.

The notional ADOC has OPCON of all-domain effects. It serves as the operational level of C2 of all-domain effects subordinate to CCMD or TF. It is led by a Brigadier or Major General (Rear Admiral) from any service. The joint force commander will execute OPCON through an ADOC and each subordinate task force commander will also execute OPCON through their assigned ADOCs. The number of ADOCs and M-BMTs allow for a robust, resilience network in conflict when communications are disrupted and degraded. The ADOCs are scalable and can be mobile or fixed. They are designed to be self-sustaining for extended periods. The task force C2 structures are enabled to control any domain specific assigned or attached forces. Their authority is vested in their position, not in their rank. The ADOC will consist of subject matter experts leveraging artificial intelligence and machine learning. It can be geo-located or fully distributed. It performs both deliberate and dynamic planning for operations across all domains and spectrums. The ADOC requires the ABMS to be fully functional.

The notional M-BMTs are led by Major or Lieutenant Colonel (Lieutenant Commander or Commander) and consist of multiple crews that cover all domains. The M-BMTs are able to mobile or virtual and are equipped with an extensive communication suite. The M-BMTs deliver tactical C2 across all domains and also backup their associated ADOCs, if needed. They are also able to control maneuver through all domains in order to achieve effects against specific objectives. They are tailorable and diverse. They perform dynamic planning and execution.



STANFORD DESIGN THINKING PROCESS PROTOTYPE #3: PROBLEM-CENTRIC C2

Group 3 designed a prototype that envisioned, like Group 1, a global combatant commander with an associated ADOC directing the standup of a joint task force. This design also requires a new Goldwater-Nichols Act of Congress. The force is not limited in the traditional sense but is instead problem-centric. It is assigned a mission and it executes that mission irrespective of domains, areas of responsibilities or joint operating areas. The task force could be global in scale.



Figure 8: An example of a problem-centric joint force

This force structure will require a culture change. Combatant commands may go away. The ADOCs and M-BMTs constructs are not dissimilar to what is described in the Group 2 prototype. As with Group2, these C2 structures assume that ABMS will be developed and fielded.

The widespread assignment and use of conditions-based authorities are a key component of this prototype. The joint force C2 will require a global capability to see and communicate across all domains. Group 3 believed that changing OPCON to make it transferable might make this structure more effective, especially in a degraded and disrupted communications environment.



STANFORD DESIGN THINKING PROCESS

PROTOTYPE #4: MISSION-ORIENTED C2

Group 4 attacked the COMREL problem by developing task forces with pre-packaged COMREL and all domain assets and associated support necessary for the accomplishment of particular problem set. The problem would be bounded by the commander (physical, cognitive, temporal boundaries). Appropriate authorities would be delegated to the task force commander, who via the task force's ADOC that is enabled by AI and JADO tools based on the problem direct the forces within the commander's span of control.

At the strategic level, the task force requires global access and unfiltered data. Broad COMREL authorities are required and interface with each Service and domains. At the operational level the ADOCs and All Domain Tactical Centers will produce operational plans and refinement of same, advocate for resources as required and beyond what is currently available and receive tactical feedback. The tactical centers will be granted the latitude necessary to accomplish convergence of effects as need to meet objectives.

Group 4 envisioned strategic-level All Domain Support Centers (ADSCs) that set priorities for LOEs based on the campaign plan, established conditions-based triggers for COMREL and authority shifts, prioritized effects and provided data forward as needed. Group 4 employed another concept that emerged in **Doolittle 2018**, Operations Command or OPCOM that can be moved to different levels as needed. If necessary and as limitations allow, the ADSCs can extend time on station to allow for emergent requirements irrespective of priorities. The ADSCs plan and develop a target-based approach to the employment of non-kinetic effects during the competition phase.

The Group assigned ADOCs at the task force level. They tailor and refine LOEs assigned by the associated ADSC, generate an integrated tasking order (ITO) and mission tasking orders (MTOs), maintain asset visibility and provide asset-based effect prioritization. They exercise both OPCON and OPCOM of forces. They also provide any constraints associated with the assigned assets and the assigned effects that are to be generated.

There are two types of ADTCs, high-tactical and low-tactical. The high-tactical further tailor and refine LOEs, issue MTOs and maintain visibility of assigned and attached assets. They maintain OPCON and TACON of forces as authorized through the associated ADOC. They

identify optimal engagement windows. The low-tactical ADTC also tailors and refines LOEs, issues MTOs and maintains asset visibility. However, it only receives TACON of forces necessary for a specific target. During the competition phase, the ADTC executes target sets using non-kinetic assets.

Prototype #4 enables the joint force to execute echeloned objectives or schemes of maneuver. It provides a framework to align purpose against specific task forces and types. It enables planners at all levels to understand the tools available at their disposal. The Group asserts that the prototype enables the dynamic retasking of global and strategic levels. Authority delegation and constraint definitions are purposely defined at each level. The low-task ADTCs provide the C2 structure with redundancy and resiliency.

This prototype makes it easy for allies to align with the task force as their capabilities and resources allow. It also should allow allies access to capabilities not normally made available to them. It should enable the task forces the latitude to find efficiencies and exploit emerging opportunities across all domains. Finally, these task forces should be able to achieve multi-domain convergence across all echelons that is nearly optimal and efficient. It provides the best-possible sensor, shooter, C2 combination to achieve the effects and execute the mission.



Graphical Depiction (a Way)

Figure 9: Mission-Oriented C2 Example



Way Ahead

Chennault 5 was the fifth in a series of events intended to inform future JADO doctrine. This event continued to explore how the joint force can execute JADO by exploring different COMREL structures that have the potential to enable JADO. The four 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. Who will perform these functions is still to be determined. All lessons will culminate in a major wargame during the summer of 2021.