

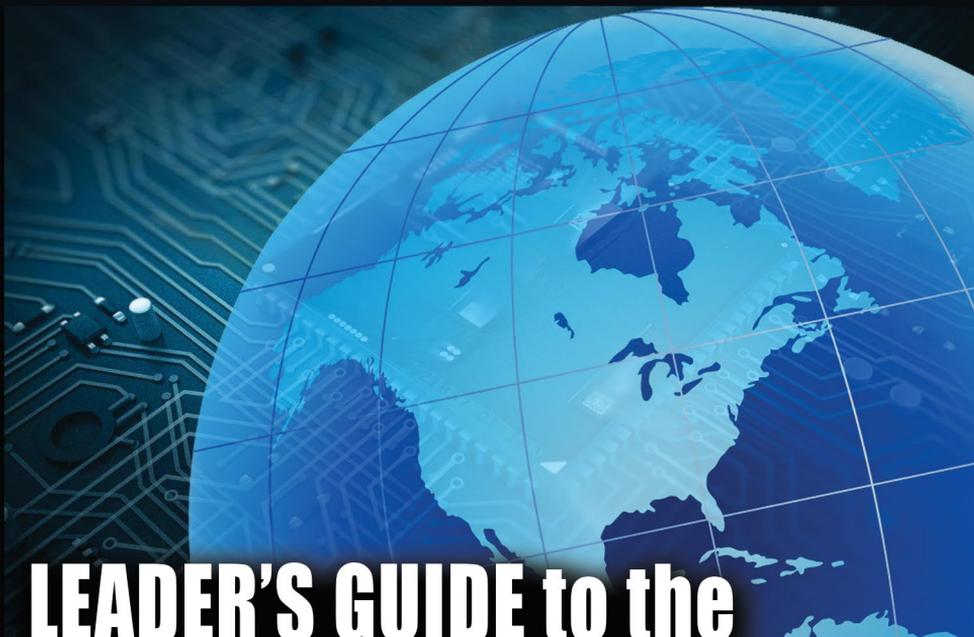


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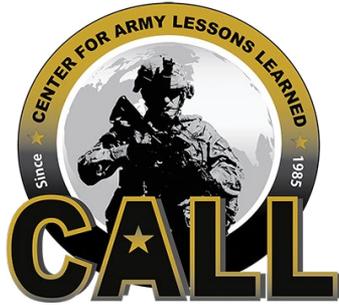
DEC 2017



LEADER'S GUIDE to the DIGITAL LIAISON DETACHMENT

LESSONS AND BEST PRACTICES

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Leader's Guide to the Digital Liaison Detachment

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Foreword

The U.S. Army does not operate in isolation. Nearly every operation is typically joint, while increasingly we also conduct warfighting with a multinational partnered coalition force by our side. One key challenge when operating with coalition partners is how to integrate relevant information and display a common operational picture to continuously synchronize operations in a changing and possibly degraded environment to ensure unified action partner interoperability.

This handbook provides leaders and supporting staff in the operational Army with an overview of how to plan, train, and leverage the capabilities of digital liaison detachments (DLDs) that render a critical capability for mission command liaison and interoperability. Also included are operational insights from Center for Army Lessons Learned (CALL) assessment teams during exercises Anakonda 16 and Saber Guardian 17. DLDs are assigned or attached to selected theater armies and Army Service component commands. They are employed at theater armies or in support of corps and division echelons. These teams provide an Army Forces (ARFOR) commander with the capability to conduct liaison with subordinate or parallel joint and multinational headquarters within the operational area.

The DLD provides Army representation inside the coalition partner headquarters to assist in clarifying orders, interpreting commander's intent, and identifying and resolving problems involving plans, policies, and procedures. Potential coalition partners may lack operational experience in large-scale military operations and may not fully understand U.S. Army doctrine and supporting tactics, techniques, and procedures. The DLD provides the supported coalition partner with U.S. Army subject matter experts (SMEs) on maneuver, fires, intelligence, and sustainment. These SMEs assist the coalition partner in planning, executing, and assessing military operations, and ensuring that the coalition partner's operations are adequately coordinated and synchronized with the operations of the overall coalition force.

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Director, Center for Army Lessons Learned

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Chapter 1

Introduction to Digital Liaison Detachments

“With our allies and partners, we will make greater efforts to coordinate our planning to optimize their contributions to their own security and to our many combined activities.”

“The U.S. would likely need to count more on allied and partner contributions in future confrontations and conflicts.”

— Quarterly Defense Review, 2014

Background

Although the U.S. Army approved the current designation of digital liaison detachments (DLDs) in 2009, small units with similar missions have existed. The U.S. Army formed these units to provide liaison and assistance to U.S. partners and allies during World War II, the Korean War, and Vietnam War. However, after these conflicts, the “liaison” units were inactivated and their experiences lost.

Lessons learned during Operation Desert Storm indicated the need to retain these teams. Consequently, U.S. Army Training and Doctrine Command provided the personnel for five “battle-rostered” teams during most of the 1990s. Since the 1990s, these units have been variously designated as mobile liaison teams (MLTs) and later as Army liaison teams (ALTs). By 1999, the Army approved a total Army force structure of one active, six Army National Guard, and four U.S. Army Reserve ALTs, each with 23 people.

Simultaneously with the MLTs, combat support coordination teams (CSCTs) were similar table-of-distribution-and-allowance organizations that were assigned to the Eighth U.S. Army in Korea since the 1970s. Located with each of South Korea’s three field armies, the CSCTs provided coordination and liaison for Combined Forces Command, U.S. Forces Korea, and Eighth Army. Due to the nature of their duties, these teams had joint and Army documentation and staffing. The forward CSCTs 1 and 3, were primarily operational. They augmented staffs and supported the First Republic of Korea (ROK) Army and Third ROK Army. CSCT 2 supported the Second ROK Army. It had a sustainment and joint security area focus and served as the U.S. element of a combined rear area center during conflict. All the CSCTs served to facilitate coordination for U.S.-unique aspects of maneuver, fires, intelligence, protection, and sustainment support.

During Operations Enduring Freedom (OEF) and Iraqi Freedom (OIF), the Army employed numerous ALTs. U.S. Army Central (ARCENT) initially used its 3rd ALT in OEF as well as multiple reserve component teams with the International Security Assistance Force in Kabul. Several ALTs were also used during OIF. During 2010 through 2015, teams were used to provide personnel advice and assist units and joint border coordination centers during OEF.

Army Liaison Teams in Afghanistan

“The 930th ALT was incredibly useful for coordination with a multinational lieutenant general-level headquarters (International Security Assistance Force) in a complex situation on a 24/7 basis.”

— BG Thomas Maffey, U.S. Army, J-3, Joint Task Force-180,
28 APR 2005

DLDs are the lineal successors of the successful Desert Storm MLTs, the previous ALTs employed in OEF and OIF, as well as the former South Korean-based CSCTs. In 2009, the DLD structure was a result of the Strategic Review Committee 51 decisions and was subsequently approved by the U.S. Army Chief of Staff. The DLDs were approved for an operating design with 30 personnel and capability in all five functional aspects supported by standard Army systems and enlisted operators. DLDs fall under the purview of the Mission Command Center of Excellence at Fort Leavenworth, KS, which is responsible for their force modernization and doctrine.

Overview

Working closely with allies and multinational partners is a key and enduring element of the U.S. national strategy. The U.S. frequently needs support from its partners and allies to prevail in contemporary conflicts. Likewise, U.S. partners and allies often rely on extensive U.S. support during regional and internal conflicts. One key challenge when operating with coalition partners is how to integrate relevant information and display a common operational picture (COP) to continuously synchronize operations in a changing and possibly degraded environment in order to ensure unified action partner interoperability.

Liaison between military headquarters allows commanders to integrate military operations in joint, intergovernmental, and multinational environments by providing necessary staff interface, mentoring, support, and communication required for partners and allies to accomplish their missions. Consequently, effective military liaison provides for an enduring need. DLDs are units specifically designed and dedicated to providing a critical capability for mission command liaison and interoperability.



Figure 1-1. An officer with the 2500th DLD, 7th Civil Support Command, listens to the director general of the Burundian National Defense Force's Kamenge Military Hospital on 28 JAN 2015 during the U.S. Army Africa/U.S. Embassy-Burundi joint Medical Readiness and Training Exercise 15-1, a partnership event with the Burundi National Defense Force. (Photo by SFC Matthew Chlosta, 7th Mission Support Command)

DLDs are assigned or attached to selected theater armies and Army Service component commands for employment at theater army or in support at corps and division echelons. These teams provide an Army Forces (ARFOR) commander with the capability to conduct liaison with subordinate or parallel joint and multinational headquarters within the operational area.

The DLD provides liaison capability between ARFOR, joint force land component command/coalition forces land component command, joint task force, subordinate headquarters, and multinational headquarters to ensure communication, mutual understanding, unity of purpose, and action. It provides a coalition partner with the interoperability link to integrate and stimulate U.S. mission command systems and a synchronized digital COP through the Army Battle Command System (ABCS) (i.e., Command Post of the Future [CPOF], Army Field Artillery Tactical Data System [AFATDS], Distributed Army Common Ground System-Army [DCGS-A], Air and Missile Defense Workstation [AMDWS], and the Tactical Airspace Integration System [TAIS]). **Note:** System integration issues are precisely why a DLD is necessary. Stimulation of U.S. mission command systems is done by DLD operators who manually enter information obtained from the unified action partner.

The DLD provides Army representation inside the coalition partner headquarters to assist in clarifying orders, interpreting the commander's intent, and identifying and resolving problems involving plans, policies, and procedures. Potential coalition partners may lack operational experience in large-scale military operations and may not fully understand U.S. Army doctrine or Army tactics, techniques, and procedures. The DLD liaison officer (LNO) team provides the supported coalition partner with U.S. Army subject matter experts on maneuver, fires, intelligence, and sustainment. These subject matter experts assist the coalition partner in planning, executing, and assessing military operations and ensuring the coalition partner's operations are adequately coordinated and synchronized with the operations of the overall coalition force.

DLDs are composed of 30 personnel experts in five functional areas — operations/maneuver, intelligence, fire support, logistics, and air and missile defense — capable of providing advice and assistance to supported partner units and ensuring rapid and more accurate communication between headquarters. DLDs may have organic transportation but must receive communications support, security augmentation, logistics/life support, and medical support from theater army units. DLDs may require augmentation with specific language capabilities.

The DLD may be employed as a single element for 24-hour operations as a multinational coordination center or at a national level with a host ministry of defense at a large multinational (corps or equivalent) or other Service headquarters (i.e., a marine expeditionary force). When the situation requires, supporting headquarters split DLDs into two less robust, but equivalent 15-person liaison teams at two separated locations. The DLD maintains contact with the host headquarters and exchanges information through the ABCS (e.g., AFATDS, DCGS-A, CPOF, AMDWS, and TAIS), therefore providing the capability to digitally receive, transmit, and interpret orders and graphics that include the COP, fire support control measures, coordinated air traffic control measures, and the current air picture.

The DLD LNO is dependent on and supported by a U.S. Army signal element provided by the Theater Network Command. This signal element provides the network structure to connect the ABCS of the DLD LNO team to the U.S. joint communications networks. In turn, the staff assistance elements of the DLD LNO team, through its networked ABCS systems, provide the coalition partner headquarters with the capability to digitally receive and transmit information.

The DLD uses joint and Army doctrine and regulations as appropriate to accomplish its assigned role. It supports and expands on joint doctrine in Joint Publication (JP) 3-16, *Multinational Operations*, 16 JUL 2013, for multinational operations, and for the Joint Force Land Component Command in JP 3-31, *Command and Control for Joint Land Operations*, 24 FEB 2014. Field Manual (FM) 6-0, *Commander and Staff Organization and Operations*, 05 MAY 2014, provides liaison fundamentals while Army Regulation (AR) 34-1, *Multinational Force Interoperability*, 10 JUL 2015, provides Army policy for activities that contribute to multinational force interoperability.

Division Operations

DLDs provide the division commander with an augmentation liaison element for major subordinate or parallel multinational headquarters. They consist of teams with expertise and equipment in intelligence, operations, fire support, air defense, and sustainment. They are capable of analyzing the situation, facilitating coordination between multinational forces, and helping cross-boundary information and operational support. These 30-Soldier detachments are essential for routine liaison and advising and helping multinational partners conduct and plan operations at intermediate tactical levels. These detachments operate as a single entity for liaison with a major multinational headquarters, provide two smaller teams for digital connectivity and liaison with smaller multinational headquarters, or can be tailored to match a given mission.¹

Either as a tactical headquarters or as a joint force land component, the division commands multinational forces. Normally, these forces are under the tactical control of the division. Depending on the size of the multinational force, the division commander reorganizes the staff and command group (see JP 3-16). For example in Afghanistan, U.S. divisions frequently operated with a NATO general officer in their command group when the division commanded a brigade equivalent from that nation. The division commander may deploy the tactical command post to the command post of a large multinational formation to ensure the multinational force has full connectivity with the division main command post. Normally, the division receives a DLD to support this requirement.²

Although the following DLD training vignette is notional, it presents a best-case scenario that depicts how effective DLDs can be used to enhance multinational force interoperability, improve unity of effort, and help sustain a coalition COP.

Vignette: Leveraging Digital Liaison Detachments

Although conducting joint and combined operations in ROK, the corps commander directed his staff to integrate the two active duty DLDs into the theater mission command architecture.

The DLDs, already stationed on the peninsula, recently received augmentation with additional personnel from the National Guard. Both detachments were equipped with full ABCS and additional linguists to facilitate interoperability with ROK multinational partners. **Note:** The field often requires more liaison capacity than they can meet.

Based on experiences from recent exercises, the corps staff coordinated with the DLD commander and his staff to implement a plan that would allow the U.S. headquarters to share the corps COP with their Republic of Korea Army (ROKA) counterparts. In addition, the DLD would need to help translate the U.S. corps directives and orders to ensure coalition operations could be executed.

With the augmentation from the National Guard, the DLD staff was able to support operations across all the warfighting functions. Partnered with the corps staff, the DLD staff was able to leverage its expertise to rapidly communicate key information using a variety of mission command systems.

Without the DLD functions, the corps commander and staff would have had immense difficulty communicating with their ROKA counterparts. The DLD capabilities enabled U.S. and the partner nation unit to conduct operations, bridging both technology and cultural divides that allowed the corps and theater army to accomplish the mission.

Insights

The additional personnel enhanced the DLD capabilities to help cover potential gaps in the allied command structure and extend operational mission command capability, enhancing unity of effort. The robust DLDs enabled U.S. forces to mitigate risks through better force management and more effective military-to-military multinational force interoperability with U.S. allies. Additionally, the rapid changes in the security environment created opportunities for the U.S. forces to strengthen alliances and build capacity.

Although the partnered ROKA possessed digital command and control (C2) capabilities, and actively participated in interoperability solutions with the U.S. Army, the additional DLD capabilities helped achieve and sustain an improved coalition COP by conducting the following:

- Establishing a network-enabled, shared situational awareness
- Improving C2 on the move (i.e., during maneuvers)
- Increasing the effectiveness of collaborative planning during multinational partnered operations
- Networking fires
- Improving combat identification and reducing the risk of friendly fire
- Enhancing intelligence and information collection

Endnotes

1. Army Techniques Publication 3-91, *Division Operations*, 17 OCT 2014, page 1-76.
2. FM 3-94, *Theater Army, Corps, and Division Operations*, 21 APR 2014, page 6-2..

Chapter 2

Planning Considerations for Digital Liaison Detachments

“Leaders at all levels face the reality of force and budget reductions, increasing operational requirements, and an ever-changing global situation. Although challenging, this environment provides the ideal conditions to develop the leaders of tomorrow.”

— GEN Robert B. Abrams, U.S. Army Forces Command

Planning for digital liaison detachments (DLDs) is an essential task as units must consider multiple requirements for training and operational deployment. As Army Doctrine Reference Publication (ADRP) 5-0, *The Operations Process*, 17 MAY 2012, notes:

Planning is the art and science of understanding a situation, envisioning a desired future, and laying out effective ways of bringing that future about (Army Doctrine Publication [ADP] 5-0, *The Operations Process*, 17 MAY 2012). Planning helps commanders create and communicate a common vision between commanders, their staffs, subordinate commanders, and unified action partners. Planning results in a plan and orders that synchronize the action of forces in time, space, and purpose to achieve objectives and accomplish missions.¹

DLD leaders must consider train-up requirements, deployment planning, and operational support to Army units. This support could include real-world contingency support or exercise support. In addition, the challenge for Reserve Component DLDs is complicated by multiyear training and preparations to meet Army needs.

Planning Fundamentals

Planning is the primary mechanism to help commanders understand the operational environment and develop solutions to problems. In addition, the planning process helps the DLD commander and staffs anticipate events, adapt to changing circumstances, task-organize the force, and prioritize efforts.

Commanders focus planning. Commanders focus the planning effort by providing their commander’s intent, issuing planning guidance, and making decisions throughout the planning process. They are responsible for applying discipline to the planning process to meet the requirements of time, planning horizons, simplicity, level of detail, and desired outcomes. Commanders ensure all operation plans and orders comply with domestic and international laws. They also confirm that the plan or order is relevant and suitable for subordinates. Generally, the more involved commanders are in planning, the faster staffs can plan. Through personal involvement, commanders ensure the plan reflects their commander’s intent.

Develop simple, flexible plans through mission orders. “Mission orders are directives that emphasize to subordinates the results to be attained, not how they are to achieve them.”²² In addition, they clearly convey the unit’s mission, purpose, and commander’s intent without prescribing exactly how to execute the plan. Staffs prepare clear, concise mission orders that communicate an understanding of the operation to minimize the chances of misunderstanding. Developing shorter, rather than longer plans aids in maintaining simplicity while being easier to disseminate, read, and remember. Plans with inherent flexibility enable leaders and staffs to adapt quickly to changing circumstances by integrating opportunities for initiative into plans by anticipating events.



Figure 2-1. Soldiers with U.S. Army Central’s DLD and 4th Infantry Division discuss their experience partnering with Jordanian soldiers during exercise Eager Lion 2017. (Video screenshot by SGT James Mason)

Optimize available planning time. Time is one of the most critical variables in operations. All planning requires the skillful use of available time to optimize planning and preparation throughout the unit. Taking more time to plan often results in greater synchronization. However, delay in execution risks yielding an initiative with more time to prepare and act to the enemy. When allocating planning time to staffs, commanders must ensure subordinates have enough time to plan and prepare their own actions prior to execution. Commanders follow the one-third, two-thirds rule as a guide to allocate time available, giving one-third of the time available before execution for their planning, and allocating the remaining two-thirds of the time available before execution to their subordinates. Planners must also consider the use of collaborative and parallel planning to help optimize available planning time. Collaborative planning involves commanders, subordinate commanders, staffs, and other partners sharing information, knowledge, perceptions, ideas, and concepts regardless of physical location throughout the planning process. Parallel planning is the process in which two or more echelons plan for the same operation and share information sequentially through warning orders from the higher headquarters prior to the higher headquarters publishing the operation plan or order. Because several echelons develop their plans simultaneously, parallel planning can significantly shorten planning time.

Continually refine the plan. Revising and refining the plan is a key activity of the planning and preparation processes. The commander's situational understanding may evolve over the course of operations as clarity of the operational environment is increased. Often, assumptions made during planning may be proven true or false. Intelligence analysis may confirm or deny enemy actions or the status of friendly forces may change as the situation changes. In any of these cases, commanders identify the changed conditions and assess how the changes might affect the upcoming operation.

Due to a DLD's interaction with multiple levels of command up to theater level, the DLD staff must consider multiple planning horizons to integrate plans and training to ensure events are scheduled and resourced by the supported command. By doing this, the DLD leaders can focus the organization's planning efforts to shape future events.³ The most common framework involves the following three planning horizons: long-range, mid-range, and short-range:

- A long-range planning horizon covers a unit's overarching training plan over an extended time (typically years). It synchronizes supporting units and agencies so that a unit can properly execute its training events. It is graphically depicted on a unit training plan calendar.

- A mid-range planning horizon further refines the long-range planning horizon. It details the broad guidance for training events closer to the training start.
- A short-range planning horizon defines specific actions (plan and prepare) prior to the start of training. (see Figure 2-2 from Field Manual [FM] 7-0, *Train to Win in a Complex World*, for additional details regarding planning horizons for training.⁴ In addition, ADRP 5-0 has a detailed discussion on planning horizons.⁵

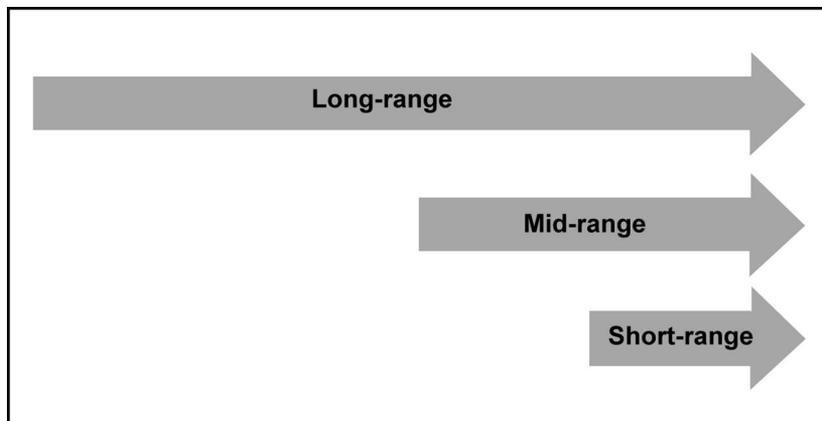


Figure 2-2. Planning horizons for training

The long-, mid-, and short-range planning horizons generally have a longer duration for Reserve Component units and typically span several years. For example, the long-range planning horizon (and subsequent unit training plan) for a Reserve Component brigade may span up to five years. For a regular Army brigade, this would typically be one year. See Tables 2-1 and 2-2 from FM 7-0 for details on the amount of time needed by echelon to ensure parallel and collaborative planning can be accomplished across the force.⁶

Table 2-1. Planning horizons for training

<i>Echelon</i>	<i>Publishes CTG with calendar NLT¹:</i>	<i>Planning horizon</i>
Corps	12 months prior to training start	2 years
Division	10 months prior to training start	2 years
Installation	10 months prior to training start (calendar only)	1 year
Brigade	8 months prior to training start	1 year
Battalion ²	6 months prior to training start	1 year
¹ Publication dates also apply to similar command-level TDA organizations or activities. For example, a TRADOC COE normally commanded by a major general follows the same planning cycle as a division commander.		
² Companies develop and publish their own UTP. The battalion commander, in collaboration with subordinate company commanders and the battalion staff may develop a consolidated battalion UTP.		
COE	center of excellence	TDA table of distribution and allowances
CTG	command training guidance	TRADOC Training and Doctrine Command
NLT	no later than	UTP unit training plan

Table 2-2. Reserve Component long-range planning by echelon

<i>Echelon</i>	<i>Publishes CTG with calendar NLT¹:</i>	<i>Planning horizon</i>
Flag officer CMD, separate brigade, regiment or group	18 months prior to training start	5 years
Brigade or separate battalion	10 months prior to training start	5 years
Battalion ²	6 months prior to training start	2-3 years
¹ These actions also apply to similar command-level TDA organizations or activities. For example, a regional support command, commanded by a major general follows the same planning cycle as a division commander.		
² Companies develop and publish their own UTP and calendar. The battalion commander, in collaboration with subordinate company or troop commanders, and the battalion staff may consolidated a battalion UTP.		
CMD	command	TDA table of distribution and allowances
CTG	command training guidance	UTP unit training plan
NLT	no later than	

Meetings and Conferences

DLD planners should be prepared to attend multiple conferences to ensure equities of the DLD are represented. These conferences integrate and synchronize sourcing of global and resourcing requirements of units to meet specific missions. The conferences manage sourcing, training, resourcing, and synchronization of Sustainable Readiness Model execution.⁷

One key event is the Army Synchronization and Resourcing Conference (ASRC). At the ASRC, units may request DLD support for events such as Mission Command Training Program (MCTP) warfighter (WfX) exercises, Security Force Assistance missions, or even support to joint exercises. The outputs from the ASRC include synchronized resources, unit situational templates, Army training laydown, combat training center calendar and execution order, reintegration plan review, and the identification of issues and trends including visibility of meeting manning and equipping aim points. The ASRC is also responsible for the coordination of other significant exercises and events to include mission command seminars, equipping conferences, and Reserve Component mobilization center coordination.⁸



Figure 2-3. The chief of fires for the 2500 DLD in Vicenza, Italy, shows a staff officer in the Italian Artillery Brigade the capabilities of the Command Post of the Future software during exercise Dynamic Front II at the 7th Army Training Command's Grafenwoehr Training Area, Germany, 26 FEB to 10 MAR 2017. (Photo by SSG Kathleen Polanco, 7th Army Training Command)

To further address future DLD requirements, the DLD commander and his staff may consider sending planners to events with the supported command. This may include theater-level training synchronization conferences, Joint Event Life Cycle planning conferences, and local installation training conferences. By attending these events, DLD leaders can confirm that their resources are scheduled in accordance with the unit's training and deployment plans. In addition, attendance at these events gives the unit an opportunity to discuss in detail what the DLDs do to support the Army worldwide.

Digital Liaison Detachment Employment Requirements

As the DLD commander and staff attend planning events, they must communicate their specific requirements to the supported unit to ensure the DLD is able to deliver effective support to the unit.

The following is a list of requirements for a DLD supporting an overseas contingency with coalition/foreign forces integrated in the command structure:

- Exercise planning cycle
- Network Joining, Membership, and Exiting Instructions (JMEI)
- Communications exercise schedule
- Linguist support
- Security clearance considerations
- Support for training exercises
- Security augmentation (mission, enemy, terrain and weather, troops and support available-time available and civil considerations [METT-TC])
- Logistic/life support (METT-TC)
- Signal support
- Medical Support
- Deployment of a DLD headquarters versus digital liaison team (DLT)
- Rules of allocation
- Support package design
- Training/external evaluation (EXEVAL) support
- Predeployment EXEVAL

Insight: Attend the site survey of the training location, which is conducted during planning. The survey should focus on work/response cell location, lodging, meal plan, and transportation requirements.

Sustainable Readiness and the Digital Liaison Detachment

In the 2014 Green Book, then LTG James Huggins, Army Deputy Chief of Staff, G-3/5/7, spoke about the importance of readiness and the Sustainable Readiness Model.

The Army is changing the way we look at readiness generation. We can no longer afford the “Readiness Cliff.” That is the perception, that the Army’s current force generation policies are wasteful because they “break” units as they leave their available period. As we look to the future, the Army must adapt its force generation practices from those based on combat deployment windows to balanced approach that optimizes and promotes sustaining readiness. As such, the Sustainable Readiness Model allows the Army to maintain a viable and credible deterrence capability while also meeting enduring requirements. The Sustainable Readiness Model will empower commanders and is flexible enough to accommodate differing readiness levels given anticipated mission requirements. In short, the Sustainable Readiness Model will reduce the readiness “peaks and valleys” we have witnessed for the past decade and enhance the Army’s ability to preserve the readiness of the force and balance the Army’s steady state missions and contingency response requirements.⁹

For the DLD commander and staffs, the development of a plan that ensures the unit can maintain an acceptable readiness level at all times is a significant challenge. The level of readiness that can be considered acceptable may vary between organizations and is also based on the nature of the unit’s anticipated deployment. As the Army must maintain immediate responsiveness and deterrence along the spectrum of possible contingencies, DLDs must be prepared to execute their mission, regardless of regional alignments.

Reserve Component planners have additional challenges specific to their component. There is a limited number of training days each fiscal year. This constrains the DLD’s ability to support WEXs and contingency operations (without mobilizing the unit into a Title X status). Figure 2-4 shows a multiyear methodology that provides DLD commanders and staffs the ability to conduct effective training in preparation for support to Army Service component command requirements. The culminating event for each preparation year is a functional exercise or EXEVAL.

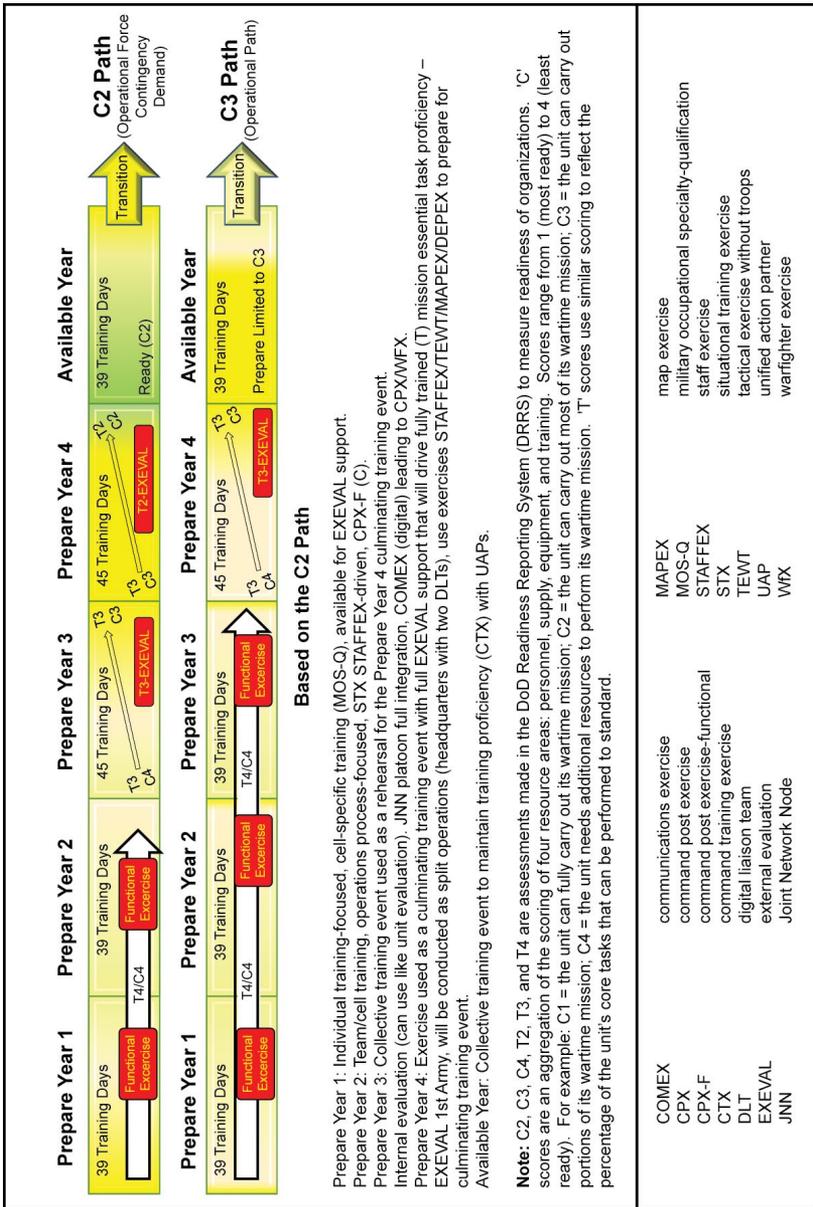


Figure 2-4. Reserve Component objectives, years one through five (Source: DLD conference slides)

Another consideration is the development of warfighter training support packages (WTSPs). A WTSP is a complete, detailed, exportable package integrating training products, materials, and information necessary to support operating force training. WTSPs provide the actual details for securing the materials, training venues, and other necessary resources identified in each unit's Combined Arms Training Strategy (CATS) training events supporting the Headquarters, Department of the Army-approved mission essential task list (METL) for designated units. A WTSP is a product that uses analysis, design, development, implementation, and evaluation (ADDIE).

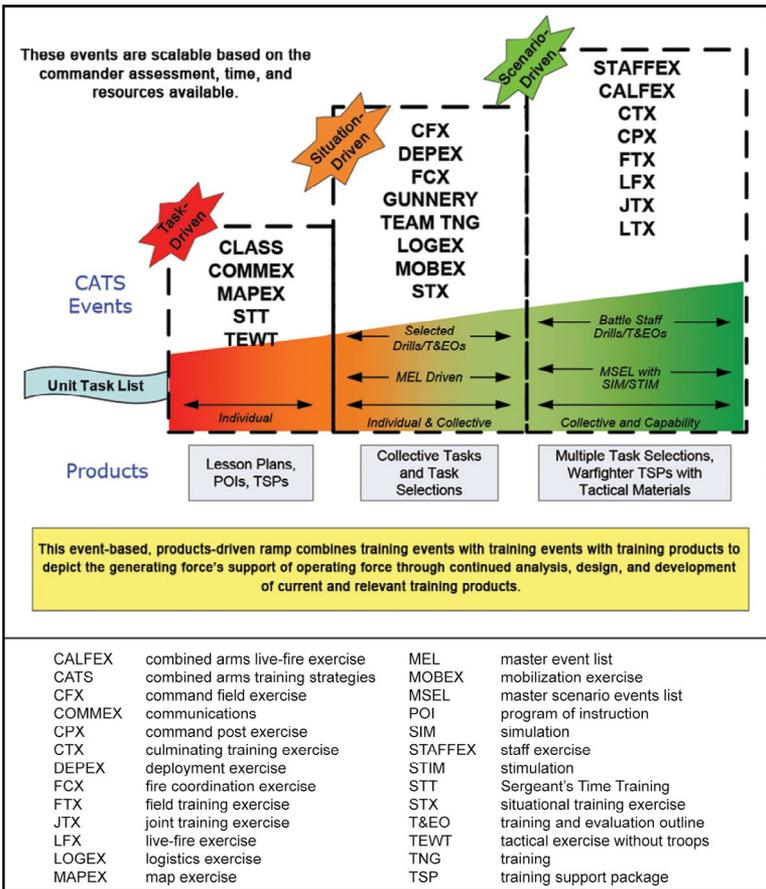


Figure 2-5. WTSPs relationship to CATS events
 (Source: Department of the Army Training and Doctrine Command Pamphlet 350-70-1, *Training Development in Support of the Operational Domain*, 24 FEB 2012)

WTSPs are developed to support the operating force in execution of the CATS events identified in a task selection. The creation or revision of a CATS task selection drives the need to develop or revise a WTSP. The WTSP provides higher headquarters with information to allow the training unit to plan, prepare, execute, and assess the events identified in the CATS task selection. The WTSP also provides the training unit with identification of the support materials necessary for the event planning and coordination process. The more complex the event, the more robust the WTSP needs to be to support it.

Planning Insights

- Having a representative attend the final planning conference was extremely valuable to obtain information on the exercise, operation plan, expectations of the DLD, billeting, and sustainment. It is recommended that the operations chief also attend future planning conferences, as that individual is uniquely trained and experienced to actively participate in the planning process, provide insight on the integration of the DLD, and provide that linkage in the planning and preparation at home.
- Two months is not adequate time between securing the mission and execution. Two recent exercises in Europe, Saber Guardian 17 and Anakonda 16, leveraged the lessons gained from prior exercises, reducing the time needed to execute the mission. Both the supported unit and the DLD staff should allocate adequate planning time to tailor the support to meet operational needs and integrate the DLD into the exercise.
- Standardize command post layout and practice information flow. Provide these standard operating procedures to the respective operations group of a training audience.
- Acquire maps annotating key main supply routes, infrastructures, bridges, and key terrain features to provide a better understanding of the operational environment including a short description, pictures, and explanation of why they are important.
- Build a relationship with higher headquarters and receive a concept of operations brief from the G-3/33 as soon as possible.
- Ensure all team chiefs make contact with their counterparts at higher headquarters before the exercise execution no later than the midterm exercise plan and have information for daily contacts during the exercise (i.e., battle captain/major). Acquire phone numbers and email addresses for points of contact as not everyone is available in the Nonsecure Internet Protocol Router Network global address book and not on the SECRET Internet Protocol Router Network.

- Attend and participate in the operation order backbrief with key leaders.
- Bring an organic unit network specialist to ensure technical requirements are addressed and solutions are developed prior to deployment.
- Coordinate with the supporting special operations forces (SOF) unit to understand its organizational and reporting requirements and information flow. Request a SOF liaison officer in the DLD cell to facilitate better coordination and synchronization.
- Position the DLD S-3 operations officer in the unit command post as opposed to the maneuver chief.
- Ensure the DLD executive officer coordinates and manages all key leader engagements between the opposing forces and U.S. forces.

Digital Liaison Detachment Vignette

Home Station Training

Observation. Based on prior overseas deployments for training (ODTs) and information obtained from the U.S. Forces Korea website and the 2501st DLD, the 244th DLD developed a training plan to meet theater-specific and mission requirements.

Discussion. The 244th DLD developed a training plan over a three-month timeframe (December, January, and February inactive duty training [IDT]) to complete the various online requirements (survival, evasion, resistance, escape 100.2; antiterrorism level 1; Department of Defense isolated personnel report; etc.), DLD orientation brief, Exercise Key Resolve brief, Maneuver Control System training, and a staff exercise. January's IDT (06-08) period would be the primary month in which the augmentees would train with the unit (12 FEB 2017 was this unit's scheduled periodic health assessment). Authorization was obtained from the brigade and State headquarters for the change in dates for January, increasing it from monthly unit training assembly (MUTA) 4 to MUTA 6 while at a home-station armory to provide adequate time to execute the training plan. Even with the change in MUTAs, it took until close of business during February's IDT for everyone to complete the training and other requirements. The staff exercise was stopped after approximately four hours in order to allow several individuals to complete the online training.

Recommendation. The host unit should maintain an updated listing on theater-specific training and other requirements (immunizations, information to access computers and networks, etc.) and provide the information prior to the exercise. Being able to adjust the training calendar, drill dates, and MUTA count paid dividends in executing the training plan needed for this exercise and should be continued. The plan to conduct staff training was too aggressive with several individuals needing to complete some of the predeployment training requirements. A better assessment of time and tracking should be done. The staff exercise is a valuable activity in developing a base knowledge of staff processes and working in a group, provided it is done with adequate time and focus.

Endnotes

1. ADRP 5-0, *The Operations Process*, 17 MAY 2012, page 2-1.
2. ADP 6-0, *Mission Command*, 17 MAY 2012, page 5.
3. ADRP 5-0, page 1-14.
4. FM 7-0, *Train to Win in a Complex World*, 05 OCT 2016, page 1-10.
5. ADRP 5-0, page 1-14.
6. FM 7-0, page 1-12.
7. Army Regulation (AR) 525-29, *Army Force Generation*, 14 MAR 2011, para 3-3.
8. AR 525-29, para 4-2.
9. LTG James L. Huggins, Jr. *2014 Green Book: Rebuilding and Sustaining Army Readiness*. Online at <https://www.army.mil/article/134893/2014>.

Chapter 3

Training Digital Liaison Detachments

“Training is the most important thing the Army does to prepare for operations. Training is the cornerstone of readiness. Readiness determines our nation’s ability to fight and win in a complex global environment.”

— Field Manual (FM) 7-0, *Train to Win in a Complex World*,
05 OCT 2016

In order to deliver a capability to the supported commander, Army digital liaison detachments (DLDs) must hone their training programs to address internal training requirements and complete preparations to support a designated headquarters element. The considerations listed in this chapter may not be inclusive for all units and missions. The DLD commander and staff will need to appropriately plan, prepare, execute, and assess training activities.

The most effective training is derived from realistic and challenging training environments. The environment consists of conditions, supporting resources, and time that enable units and Soldiers to train individual and collective tasks to a specified level of proficiency. The commander sets the conditions of the training event to create as much realism as possible. Training resources can augment and enhance the training environment to create a more challenging and complex training for all participating in the event. Commanders must consider available training enablers to include the integration of live, virtual, constructive, and gaming (LVCG) training enablers. When properly planned and integrated, training enablers can produce a powerful training multiplier that more closely replicates the actual operational environment. A key consideration for commanders is the time available to execute the training plan. A common theme is that there is never enough time to train all tasks to the highest standard. Training within the limits of the planning horizon drives commanders to prioritize training, and therefore the unit or individual is expected to be proficient in those select tasks. Well-planned and resourced training events can produce exceptional results and ultimately increase training readiness.¹

Unit Training Management

First and foremost, unit commanders must consider the time and resources needed to complete all required tasks. Each commander should determine which tasks are essential and then assign responsibility for accomplishment of those tasks. The concept of mission essential tasks (METs) allows the commander to provide the unit with a battle focus.

A MET is a collective task on which an organization trains in order to be proficient in its designed capabilities or assigned mission. A mission essential task list (METL) is a tailored group of METs and each MET aligns with the collective tasks that support it. All company and higher units have a METL and all organizations based on a table of organization and equipment (TOE) have approved and standardized METLs. Standardized unit METLs can be found in a number of repositories to include the Army Training Network (ATN), Digital Training Management System (DTMS), and Combined Arms Training Strategy (CATS).²

The following is a list of DLD-specific tasks:

- Conduct expeditionary deployment operations in support of the offense, defense, stability, and defense support of civil authorities (DSCA). (Task No. 55-CO-4830)
- Perform predeployment supply activities. (Task No. 10-2-4804)
- Perform predeployment maintenance activities. (Task No. 43-CO-4805)
- Conduct troop-leading procedures for companies. (Task No. 71-CO-5100)
- Provide digital liaison to a unified action partner headquarters for detachments. (Task No. 71-DET-0001)
- Support the mission command operations process for detachments. (Task No. 71-DET-5100)
- Conduct command post operations for detachments. (Task No. 71-DET-5200)
- Integrate situational understanding through knowledge management for detachments. (Task No. 71-DET-5330)
- Provide the common operational picture for detachments. (Task No. 71-DET-5316)
- Employ operational security measures for detachments. (Task No. 71-DET-6111)

- Conduct foreign disclosure procedures for detachments. (Task No. 71-DET-0003)
- Integrate network operations for detachments. (Task No. 71-DET-7255)
- Provide liaison to a unified action partner headquarters for detachments. (Task No. 71-DET-0002)
- Provide the common operational picture for detachments. (Task No. 71-DET-5316)
- Process relevant information for detachments. (Task No. 71-DET-5315)
- Conduct security force assistance for detachments. (Task No. 71-DET-7369)
- Coordinate support for partner unit for detachments. (Task No. 71-DET-4100)
- Provide warfighting function support to forces for detachments. (Task No. 71-DET-0004)
- Integrate linguistic support to a foreign military headquarters for detachments. (Task No. 71-DET-3170)

As the commander and his staff develop the training plan, they must consider other factors to ensure their training will be successful. These are discussed on the following pages.



Figure 3-1. The executive officer, 114th DLD, Mississippi National Guard, reads a memorandum during Joint Warfighter Exercise 16-4 at Fort Bragg, NC, 11 APR 2016. (U.S. Army photo by SPC L'Erin G. Wynn, 49th Public Affairs Detachment)

Resourcing Realistic Training

Without resources, effective training will not occur. Resource availability directly affects a unit's ability to train and, in the end, overall unit readiness. Commanders and staffs must be familiar with the resource coordination and synchronization cycle on their respective installation. In addition, commanders may need to be prepared to conduct training on other installations (for example, Army National Guard or Army Reserve units may be directed to a specific installation for predeployment training). Commanders and their staffs are responsible for training coordination and synchronization of required classes of supply; training aids, devices, simulators, and simulations (TADSS); integrated training environment (ITE); and training facilities. At a home-station training event, training resources may be limited and must be coordinated in advance to deconflict with other units on the installation. Commanders and staffs aware of an installation's resource planning cycle are more likely to secure the right training resources when they are needed to train.³

One challenge for the Army National Guard and Army Reserve units is to ensure that the right training resources are available. Reserve Component units often coordinate with a variety of organizations for training resources, facilities, and support. In addition to major installations, Reserve Component units may have regional, state, or local capabilities that can be leveraged to meet their training needs.

Additionally, Reserve Component units may also be required to coordinate training plans with other reserve units or active duty units supporting their training. For units with existing mobilization plans, commanders should ensure the supporting installation training plan is updated. Understanding the training resource cycles and conferences requires a knowledge of and liaison with multiple facilities and training areas.⁴

Insight: Leverage ATN for training information and solutions, available online at <https://atn.army.mil>

Training Facilities

What facilities are available for unit training? To achieve a higher level of fidelity, regardless of whether the training takes place using LVCG enablers, any combination of these, and other training support tools, leaders must use training support effectively in order to replicate the complexity of the operational environment and achieve a high degree of realism in training.⁵

Facilities and their operations include mission training complexes (MTCs) formerly battle simulation center/battle command training center/mission command training center. Most MTCs provide individual operator training on Army Mission Command Systems (ABCS) and support for collective simulation and gaming-based training exercises. With oversight from the Mission Command Training Support Division, the MTCs provide LVCG TADSS in addition to integrating architecture and synthetic terrain (synthetic environment core) support. In order to support exercises, the MTC is also equipped with common hardware platforms (dual-purpose computers) to support training needs. This growing capability is available at a number of installations to include Joint Base Elmendorf-Richardson, AK; Fort Bragg, NC; Fort Sill, OK; Fort Carson, CO; Fort Sam Houston, TX; Fort Leavenworth, KS; and Fort Hood, TX.

Training Products

To accomplish the required training, the unit may need a number of products to enable the staff planning processes. Depending on the exercise objectives, the unit may need to order products from the next higher headquarters and possibly the headquarters two levels up. Operation orders, fragmentary orders, and other types of orders can be generated prior to the exercise and by the higher control cell during the training event. The dynamic development of orders during the event allows exercise control personnel to adjust conditions so the training audience can accomplish as many training objectives as possible.

Insight: The local installation training support center provides customers with state-of-the-art TADSS. These training enablers enhance unit training by adding realism and/or providing instruction that is not otherwise available. The training support center will support all units and activities of the active Army and Reserve components.

When planning the exercise, the unit should attempt to replicate the operational environment to the highest degree. This often includes the development of exercise databases. Making the determination regarding databases can present numerous challenges as real-world intelligence and targeting information will force the exercise to become classified and limit external participants.

Training and evaluation outlines (T&EOs) are the output of the development of the collective tasks and are created prior to the start of the exercise. They provide summary information concerning collective task training and individual and leader training tasks that support the successful execution of collective training. T&EOs also provide information concerning evaluation standards applicable to a training situation.⁶ A T&EO describes precisely how a specific task or drill is performed, under what conditions the task or drill is performed, and how well a unit must perform the task or drill.

Training Services

As the training plan is developed, commanders and staff must consider what enablers can be used to enhance the realism of the training event. The following is a list of capabilities that may assist the unit to create an optimal training environment.

Opposing forces (OPFOR). OPFOR play a critical role in most training events. The OPFOR's role in an exercise may be two-fold. In addition to executing the enemy plan, OPFOR leaders may also act in a neutral capacity for exercise controllers and the exercise director to ensure the training unit's objectives are being met.⁷ The OPFOR also rehearse the plan before executing the training event. The OPFOR rehearsal ensures the plan is understood and can effectively stimulate quality training.⁸

Observer controller/trainers (OC/Ts). OC/Ts observe units during training exercises to control the training unit's environment and to provide feedback during the after action review. The observation and assessment plan captures unit performance as it is executed and enables leaders and trainers the opportunity to evaluate the unit as action unfolds. This plan also includes OC/Ts walking the training areas to ensure task execution by the unit.⁹ During execution, leaders and OC/Ts perform evaluations using T&EOs to record a unit's performance.¹⁰

External evaluation (EXEVAL) support/authority. EXEVALs are unit proficiency evaluations. They are formal in nature and conducted external to the unit. The EXEVAL provides commanders with an objective way to evaluate their unit METs or selected collective task proficiencies. All units in the Army undergo an EXEVAL to validate fully trained (T) or trained (T-) task proficiency ratings.¹¹

For modified table of organization and equipment units, planners identify the training events by using CATS. This strategy enables planners to develop training since it provides a proponent-recommended strategy. CATS shows recommended multi-echelon events and identifies EXEVAL criteria. Effective planners start unit training plan development by overlaying a CATS solution over known, actual calendar requirements.¹²

Following an EXEVAL, the unit commander and the next higher commander formally discuss the unit's proficiency on METs or collective tasks as well as on the unit's overall training readiness assessment based on the EXEVAL. This discussion ensures both commanders objectively consider the EXEVAL, personal observations, and the experience of the next higher commander before the unit commander formally assesses the unit's training proficiency. In addition, it provides an opportunity for commanders to coach and mentor subordinates.¹³

Insight: In accordance with FM 7-0, an EXEVAL should consist of the following:

- The higher commander two levels up approves and resources the EXEVAL (for example, a brigade approves and resources a company-level EXEVAL).
- The commander resources EXEVAL to achieve a minimum of a T or T- task proficiency rating.
- The higher commander one or two levels up trains and certifies external OC/Ts. The senior OC/T can be from an adjacent unit within the higher command of the unit evaluated.
- The higher commander trains and evaluates METs and battle tasks to include battle drills.
- T&EOs are the objective basis of the evaluation.
- The higher commander two levels up supervises the final after action review.
- The formal commander one level up discusses with the unit commander the expected proficiency levels for METs and battle tasks to include battle drills and overall level of proficiency for readiness reporting units (see Army Regulation [AR] 220-1, *Army Unit Status Reporting and Force Registration-Consolidated Policies*, 15 APR 2010).

Role players. Most exercise venues, including simulations, require interaction between the training unit and noncombatants. Role-player instructions create behavior profiles and events for individuals and groups within the role-player population. They also schedule specific events or incidents, which require close coordination among OPFOR, role-players, and exercise control.

Exercise control/wrap-around. The exercise control division synchronizes and manages the stimulation of training units during the execution of the warfighter exercise. Exercise control ensures supporting elements that are not designated as primary training units (higher headquarters support, response cells, work cells, etc.) are properly trained and rehearsed in preparation for the exercise. Exercise control manages the synchronization and timing of exercise master scenario events list injects. Based on the guidance of the exercise director, chief controller, and operations group chiefs, exercise control ensures training units have an opportunity to meet their training objectives and outcomes.

Simulation Support — Live, Virtual, Constructive

All training events require some form of training support. Conducting training using LVCG enablers along with other training support capabilities is not a new method of training. LVCG simulations and simulators provide support to home stations and the Maneuver Combat Training Centers. LVCG training enablers and, for some select posts, the ITE are effective ways to achieve quality multi-echelon, combined arms training at home station.¹⁴

- Live training is real people training in a real environment.
- Virtual training is real people training in a simulated environment.
- Constructive training is simulated people and equipment operating in a simulated environment.

The ITE combines and connects key training enablers (TADSS) in a consistent manner to train combined arms operations and mission command according to the commander's training objectives.¹⁶

Insight: Program digital sustainment training on all digital systems in the monthly training schedule to increase proficiency.

Training Considerations

As the unit begins to develop its training plan, the commander and staff must consider what challenges will impact the unit's ability to train. Some of these issues should be identified during the planning process as potential constraints or limitations that may (or may not) be able to be mitigated.

- **Proximity to training sites.** If training is not available locally, how much time and funding are required to travel to training locations?
- **Availability of training resources.** What training resources are required to accomplish the unit's METs? If resource shortfalls exist, can they be mitigated by other training options (virtual or distant learning)?
- **Resource constraints or limitations.** Is the unit currently manned and funded adequately to accomplish the training and support missions as directed?
- **External evaluation resourcing.** How is the Army going to resource EXEVAL for DLDs? Considerations should be made not only for funding, but support personnel requirements and taskings (i.e., OC/T support packages).

- **Regional subject matter experts.** Current METs do not reference any requirement for regional expertise. In an optimal situation, regional alignments will accompany an assigned METL.
- **Limited METs.** At this time, limitations with current MET framework restrict flexibility to train.
- **DSCA.** Army National Guard DLDs may have responsibilities to support DSCA missions in their support to U.S. Army North and their associated state. Units should consider development of METs that are aligned with this mission.
- **DLD METs.** The DLD community of interest needs to review all related METs. Consider that to change the title of the MET is an 18-month process while modifying the content of a MET is much quicker.
- **Institutional support.** There is a shortfall regarding the specific tools that DLDs need to maintain readiness levels to support the Army. To meet these shortfalls, the Army must build the institutional model and products that will allow DLDs to train effectively.

Insights

- DLD participation in division or corps warfighter exercises should not be an afterthought. The DLD should be integrated as they would for operational deployment (and worst case embedded as a response cell).
- The lead planner should attend all weekly web-based working groups (i.e., exercise planning team in progress review) with the Mission Command Training Program.
- At the exercise planning events, attend at a minimum the command, control, communications, computers, and intelligence working group with the unit Functional Area 57 simulation operations officer and/or S-6 signal officer, operations sergeant major, and S-3 operations officer, if possible.
- Request Joint Training Enterprise Network accounts for all Soldiers.
- Provide “Atropian” (multinational partner) products such as campaign plan, mission, intent, task organization, operational graphics, key tasks, and an end state to the DLD no later than the initial exercise plan to assist with integration into the higher headquarters mission.
- Arrive early for the exercise to ensure digital systems are present and function properly.

Endnotes

1. FM 7-0, *Train to Win in a Complex World*, 05 OCT 2016, para 1-47.
2. FM 7-0, para 1-47.
3. FM 7-0, para 1-56.
4. FM 7-0, para 1-77.
5. *The Home Station Handbook to Leveraging Training Support to Train at Home Station*, November 2013. Online at <https://atn.army.mil/media/docs/Home%20Station%20Handbook%2020NOV13.pdf>.
6. U.S. Army Training and Doctrine Command Pamphlet 350-70-1, *Training Development In Support Of The Operational Domain*, 24 FEB 2012, page 9.
7. Training Circular (TC) 7-101, *Exercise Design*, 26 NOV 2010, para 2-18.
8. FM 7-0, para 3-26.
9. FM 7-0, para 3-27.
10. FM 7-0, para 3-30.
11. FM 7-0, para 3-49.
12. FM 7-0, para 2-52.
13. FM 7-0, para 3-51.
14. TC 7-101, para 2-98.
15. *Handbook for Leveraging Training Support to Home Station*, November 2013. Online at <https://atn.army.mil/media/docs/Home%20Station%20Handbook%2020NOV13.pdf>.
16. *Leader's Guide to Training in the Integrated Training Environment*. Online at https://atn.army.mil/media/docs/ITE_Leaders_Guide_01JAN17.pdf

Chapter 4

Digital Liaison Detachment Key Leader Perspectives

The primary focus of the digital liaison detachment (DLD) is to achieve and maintain a coalition common operational picture (COP) to enhance situational understanding and interoperability. As DLDs become integrated across the Army, the challenge of planning and executing the digital liaison mission falls on DLD commanders and staffs across the force. This chapter summarizes a key leader interview that forward liaison officers from the Center for Army Lessons Learned (CALL) conducted in March 2017 with the commander, executive officer, and sergeant major of the 2503rd DLD. The unit is subordinate to Third Army and is based at Shaw Air Force Base, SC. This exchange provides keen insights regarding mission, composition, and challenges associated with coalition multinational operations in a complex operational environment.

Key Concepts of the Digital Liaison Detachment Mission

DLDs are relatively new in the Army's force structure. The commander noted that the 2503rd DLD is one of 15 DLDs; it was activated on 16 OCT 2016 and the first activated in the continental U.S. He also highlighted that out of all DLDs, only three consist of active duty personnel and two support the defense of the Korean peninsula.

The mission of the 2503rd DLD and all others entails being a mission command liaison cell, fully complemented by warfighting functions in the Army Battle Command System (ABCS). The commander listed the numerous functions present in his detachment, which includes a fires cell, air and missile defense (AMD) cell, intelligence cell, sustainment cell, and maneuver cell. Included with each section are the requisite mission command systems that go with them, such as the Advanced Field Artillery Tactical Data System (AFATDS), Air and Missile Defense Workstation (AMDWS), Command Post of the Future (CPOF), Distributed Common Ground System-Army (DCGS-A), etc. He noted that DLDs primarily serve at the theater army level as the mission command liaison cell for unified action partners. For example, the DLD may be attached to a designated unified action partner and become embedded in the organization. Once embedded, its objective is to help the organization understand the COP being produced by the coalition forces land component command (CFLCC) or theater army.

The DLD pushes the CFLCC COP to the supported COP and in return takes its COP and enhances the one at the theater army. In many cases, unified action partners may not have the digital capabilities of U.S. forces, so the DLD becomes the intermediary to send electronic data back and forth. The commander noted that many times, the organization in which his DLD is embedded is completely analog (map boards and charts). The DLD then takes the information and populates the COP so the theater army has a better understanding and vice versa. The commander noted that “we are the go-between, but we are often alone with them.”

The commander addressed the challenges of being a small organization, only 30 personnel on the modified table of organization and equipment (MTOE). He stated that due to MTOE allocations, his organization does not have the means to plug systems into the actual network. He instead must rely on the theater army to provide capabilities for the DLD, such as a command post node (CPN) or a joint network node (JNN). The network capabilities are just one item required for the DLD to offer support. For his mission to be a success, he must rely on the theater army to provide security and linguist support. Neither is authorized on the DLD’s MTOE.



Figure 4-1. LTG Michael Garrett (left), Commanding General, U.S. Army Central (ARCENT), activates the 2503rd DLD at Shaw Air Force Base, SC. (U.S. Army photo by SGT Victor Everhart Jr.)

Redundancy is a key capability for the DLD. The commander noted his detachment has two sets of every system and can deploy two teams of 12 to 15 Soldiers to replicate the similar missions. However, if operating with two teams, 24-hour operations would be sacrificed due to lack of personnel to man the cells. Noting there are many ways to utilize the DLD, The commander highlighted that his unit is relatively new and other DLDs are more familiar with what they do because of their longevity. He commented that:

Here in Third Army, we have had the opportunity to flex what we do with a lot more diverse population in the perspective of the unified action partners in our theater. Since they do not have a transnational organization that pulls them all together like NATO in Europe, we are looking at having to potentially link up with several different countries with many different types of digital communication systems. We are there to help bridge that gap in making their systems interoperable with our systems. In fact, the motto of the 2503rd is "Bridging the Chaos."

Digital Liaison Detachment Deployments

As noted, the 2503rd DLD is one of three active DLDs. Of the 12 DLDs in the National Guard and Reserve, the Combined Arms Center (CAC), more specifically the Mission Command Center of Excellence (MCCoE), is the proponent for all DLDs. Additionally, CAC has established dedicated relationships between the respective Guard and Reserve units with existing corps and Army Service component commands as every theater army is supposed to have at least one DLD in support. The commander commented that within the U.S. Army force structure and U.S. Central Command (USCENTCOM), the 2503rd DLD and the 206th DLD in Columbia, SC, are in direct support of ARCENT. In addition, the 207th DLD, stationed at Fort Bragg, NC, provides secondary support for ARCENT. Relationships are important. The commander noted that due to proximity, his unit is building a relationship with the 206th DLD. This has included face-to-face visits among commanders and monthly teleconferences with the staffs. The relationship has grown to the point that the 206th DLD will help source some of the 2503rd DLD's requirements as a presence is built in Kuwait.

The commander stated:

The intent is to have at least a fully functional team on the ground and to have a warm base with several members from our team. We paired up an officer and noncommissioned officer (NCO) to keep fires lit and to also have a forward presence when we conduct many exercises that we are using our G-37 (exercises and theater security cooperation) to help link up with so that we can develop better relationships with unified action partners, according to the CFLCC or the Third Army commander's priorities. Our guys can be here in Kuwait forward at all times.

The commander noted his objective was to have the detachment's first rotation in 120 days. The 206th DLD would be essential to completing that mission. He continues to find ways to assist the 206th DLD by giving it deployment opportunities while still having that base forward. The commander commented that he would be rotating personnel to theater and back to home station. He did not believe any personnel would be on temporary change of station orders and the longest deployment time would be no more than 120 days. Although rotating two personnel at a time has a smaller presence, the detachment would be able to maintain unit administrative requirements, such as property book holders being able to inventory equipment in theater and items left at home station. The commander noted both he and the SGM would not be exempt from travel into theater.

Regarding use of the reserve component DLDs, The commander commented on the use of DLDs to support U.S. Army Europe (USAEUR) and the frequency of National Guard and Reserve DLD deployments to assist with exercises in Europe, similar to the 2503rd DLD's support to ARCENT. He expected that as the DLD mission develops, the DLD meets the commander's intent and, with the priority nations, develop and improve relationships with some potential partners.

Network Challenges

Connectivity is critical for the DLD to accomplish its mission. The executive officer noted that CPN also refers to the USCENTCOM partner network called CPN-X. USCENTCOM has established CPN-X with U.S. partners as a cross-domain solution to enable collaboration on the SECRET Internet Protocol Router Network (SIPRNET). The system also has phone capability, but requires a country to purchase access. CPN-X is similar to other capabilities in use such as the Battlefield Information, Collection,

and Exploitation System (BICES) in Europe or the Combined Enterprise Regional Information Exchange (CENTRIX). The DLD leadership anticipated that, as CPN-X grows, it is expected to become the primary system USCENTCOM will use with these partner nations in theater.

One key capability is the CPN the signal cells use to establish communications in theater. This includes connecting to SIPRNET and the Nonsecure Internet Protocol Router Network (NIPRNET) in a remote location to communicate. The XO noted the CPN is user designed for the command post network or a JNN. He added, "We have talked to the expeditionary signal guys, our G-6, the 335th Signal; a JNN was probably too much capability. We don't really need that much, but the CPN really provides more of the capability that we need."

To execute its mission, the DLD must connect to the command's data dissemination server. This server is the core of all data distribution in theater and supports strategic, operational, and tactical linkages. To support the theater's requirements, a CPN must be requested for a full DLD, but smaller packages such as a digital liaison team (10 to 12 personnel) would probably need only a snap terminal.

Insight: When accessing a CPN, DLDs must either request a router assembly or a personal router to plug into the command's network.

The ability to deliver the highest level of support can be challenging. The command team commented there were often struggles with video teleconference capability. In addition, it noted a signal router assembly as a key shortage on the MTOE. This router assembly is where the DLD in the tactical operations center (TOC) connects all mission command systems. The team runs one line from the router to the CPN at the G-6, where network connection and bandwidth are collected. Additionally, if JNN support (also known as a triple S) is requested, then the router is provided to support strategic through tactical communications. Despite the equipment shortfall, the DLD does have sufficient personnel (information technology specialist [military occupational specialty 25B]) who connect the DLD devices to the network established by the expeditionary signal support team.

Equipping the Digital Liaison Detachment

Based on the challenges to request needed equipment, the DLD leadership was asked about equipment shortfalls and methods to obtain the needed capabilities to fully support its designated theater. The commander noted the early DLD models had all the necessary pieces and components. However, to move the new design through the total Army analysis process, some capabilities may have been reduced or eliminated. The XO commented that an operational needs statement would provide immediate sourcing in the short term. The other option is to include equipment requirements in the tasking for signal support. The final, long-term method is to submit recommended MTOE changes to MCCoE so that as the proponent, it can address MTOE modifications and changes for all DLDs. Without appropriate equipment, DLDs may not be able to fully meet the command's requirements. The XO noted for the exercise, the supported command had some redundancies and spares to loan to the DLD.

Insight: If the unit requests a signal tasking, make sure it specifies the inclusion of a router assembly. Extra sets of communications equipment are needed to provide flexibility and redundancy for the DLD, especially when conducting split-based operations with two DLD teams.

In addition to networking equipment, the XO noted another shortfall. Currently equipped with a Deployable Rapid Assembly Shelter (DRASH), the DLD was missing a critical component, a display capability. Currently, DRASH TOC systems utilize a command center system. This piece of equipment connects to the Command Post of the Future (CPOF) and allows the commander and staff to see the current COP. Without the command and control set, no one can see the current state of operations. In addition, the ability to share the COP with other nodes, such as the contingency command post or the joint task force, is hindered.

For equipment automation (laptops, etc.), the DLD has a package at Shaw Air Force Base. However, the sergeant major noted, when the DLD is deployed, that capability does not deploy with them. The DLD has acquired some additional computers imaged for the SIPRNET and NIPRNET. In addition, the sergeant major highlighted that printers are not MTOE items and often the DLD must rely on emailing documents to others for printing when in theater. To reconcile this equipment shortfall, the sergeant major recommended that automation capabilities should be part of the DLD deployment package, therefore separating equipment used in garrison from those items needed for mission support. He continued, “This is package A and this is everything that is in it. You have your computers, all your automation, and this is what is going to get loaded up on the plane. That’s what we don’t have now, and I feel that is an important thing to have. We identified that on this go-around as a shortfall.”

As the Army now relies on vast amounts of power for electronics and environmental support, power generation is critical. The DLD’s DRASHs come with environmental control units that provide heating and cooling. The entire package can be moved with a high-mobility multipurpose wheeled vehicle, which can also provide minimal power generation for the DRASH. The XO noted that no backup power capability existed because the DLD was not authorized any 10 or 15 kilowatt (k) generators, leaving the DLD with no redundancy. The DLD reflected on its most recent exercise where two environmental control units developed problems. The DLD was able to get one working and replaced the other, but ran on a single generator to power the entire TOC. It is critical to ensure when forward deployed that a redundant power source is in place in case one generator becomes inoperative. As a digital liaison, the DLD must have power to support the command to include all components from the generator, to the power distribution box, and all the cables. Coming up with a power plan is important for an expeditionary TOC.

Insight: DLDs must have a power generation plan that facilitates uninterrupted conduct of operations for an expeditionary TOC. Ensure it includes power generation equipment (10 and/or 15k generators), power distribution box, and supporting cables. Codify requirements in tactical standard operating procedures. Develop battle drills accompanied by equipment checklists (troop-leading procedures), and rehearse them in training prior to deployment.

Supporting the Digital Liaison Detachment

Besides equipment requirements, it is the people that make the DLD run. For such a small organization, the DLD's personnel skill sets are widespread. As with equipment shortfalls, personnel shortages can present challenges as well. The XO noted the detachment had only one wheeled vehicle mechanic (skill level 20). To support all unit maintenance needs, the DLD needs a maintenance support team that includes a generator mechanic to ensure power generation is uninterrupted. But the DLD must compete with other units asking for similar personnel. Therefore, within the Army logistics structure, the DLD needs to ask if there are enough mechanics to support all the requirements. In addition, the DLD is not authorized any prescribed load list (PLL) (i.e., repair parts) or bench stock. Without any PLL, the DLD would not be able to conduct rapid repairs to essential equipment should a communications link go down. More specifically, the PLL should include wheeled vehicle and generator equipment. To sustain communication, the information technology specialist may require extra power cords, hard drives, and the tools it takes to build the wires.

To get the right people to fill the DLD's positions, the U.S. Army Human Resources Command (HRC) plays a large role. HRC assigns personnel on a semi-annual manning cycle. Based on an activation e-date of 16 OCT 2016, it was projected that some fills would not arrive for 18 to 24 months. As with equipment, this leaves little redundancy. For example, the DLD only has a single fire support specialist (military occupational specialty [MOS] 13F). The commander noted:

When it comes to artillery, I need that 13F to run the Advanced Field Artillery Tactical Data System (AFATDS). When it comes to intelligence, I need the 35Fs. I am authorized two, but I have none right now because they just have not been filled from HRC. It is especially problematic with the officers, and we have worked that issue quite a bit. So, now we are about two short on our officers. But now the enlisted side has not caught back up with manning us with our Soldiers.

Another personnel area of concern for the 2503rd is branch immaterial slots for the XO, operations maneuver chief (lieutenant colonels), and the operations maneuver operations officer (captain). MOS slots coded combat arms (O2A) can be the hardest positions to fill because they are branch immaterial, not branch specific.

Insight: Conduct predictable analysis with the G-1 to reach out and obtain personnel for billets that will be open in 12 months. If the unit misses the manning cycle and tries to source out of cycle, it may have difficulty due to the semi-annual manning cycle.

DLDs should also look beyond standard manning processes to fill open billets. The commander reflected on a recent success where the DLD was able to leverage contingency operations for active duty operational support (COADOS) orders to obtain two 90A logistics branch captains. These are positions the DLD struggled to fill. These officers were needed to form the detachment. The commander also noted that as reservists, the officers required some in-processing, but this fell in line with the process the 2503rd established for Kuwaiti operations. The unit has also requested a 14A air defense artillery major, but that specialty may go unfilled due to high demand in Patriot units. The branch immaterial operation officer captain has been submitted as another COADOS request to the Army Reserve Engagement Cell for sourcing from either the Army Reserve or Army National Guard.

To operate, sustain, and maintain the DLD, the budget must be addressed. The commander noted standing up a DLD unit costs more in operations and maintenance than the average mission force protection Level II operating unit. He further commented that the standard budget the Army gives to units for a DLD formation is around \$66,000 per year for the unit's operations and maintenance budget. As discussed earlier in this chapter, there are extra equipment and supplies the DLD must purchase that are not sourced on the MTOE. In addition, there is extra training the detachment must accomplish to establish immediate baselines. The commander detailed the training resourcing challenges:

So when we began to work with the G-8 and all resource guys to get the budget, it was about midyear. I submitted the budget over a year ago for the training we requested, and they first came up with half a year, calling everything an unfinanced requirement for the DLD. It took our G-8 about half a year to figure out this formation and what it requires. So, now with \$66,000, we reviewed the objective-T training cycle and what we wanted to do for this type of unit out at MCCoE last November. We did the training cycle and the five-year plan for Reserve and Guard units, and then we did the plan for the active duty units. If you looked at all those training events we had to accomplish, you are eating up well over \$66,000 just to get us through the training events. At least maintain our trained and ready status that we need for it.

Budget is a concern. I know everyone wants more money, but \$66,000 for a unit — that is a very low number when you look at just the maintenance alone. Consider the services and routine maintenance that we have to do throughout the year for the vehicles to be ready. Now we are conducting split-based operations, so we are able to try and take advantage of the opportunities we have here in theater with the theater-funded allocations from the Army. It doesn't come out of our base, but those things should always fund what is going on over here. The allocated amount of \$66,000 is not enough to maintain the readiness level we need to obtain.

Acquiring and maintaining additional skill identifiers (ASIs) in the DLD adds to the personnel and training challenges. The DLD is not authorized a battle staff ASI on the MTOE, but due to the small size of the organization, the DLD must ensure all Soldiers are subject matter experts. The commander iterated:

We need our NCOs to get a little bit more training than the average guy gets in a unit. We need as many battle staff ASIs for our senior NCOs that we can get. Right now, we have none, but we will still need to be able to work some deals to get guys into some classes. It would be an easier sell if we had those ASIs on our MTOE.

To further highlight the need for ASI is the need for a digital master gunner. Only one digital master gunner is authorized by ASI for the unit. This was a major topic during the DLD commander's conference. The Reserve and Guard units commented that they sent as many people as possible to the digital master gunner and the mission command digital master gunner class to train the NCOs on the systems. The DLD has only one slot, but the leadership noted that they needed to spread the knowledge among the senior NCOs.

Another slot needing greater emphasis is the signal master gunner. The 2503rd has two 25B10 specialists as signal master gunners, which is more training and a higher level for them. The commander noted that operations needed to run efficiently and effectively for the DLD, the DLD needed to stay connected, and the DLD needed an understanding of more complex issues as technology advances. The sergeant major commented that one slot should be at least a sergeant (25B20). As an NCO with more experience and ideally a staff sergeant with even more experience is the optimal solution to deal with the automation the DLD must maintain. The XO also added that the DLDs need to have significant training, using the signal personnel training as an example. He highlighted the need for signal master gunner, knowledge management, A+, Security+, Net+, and certified information systems security professional as baseline training.

For the DLD sustainment personnel, the commander felt that due to partner-nation missions, the logisticians needed to understand support operations Phase 2 and joint/multinational logistics training. Although the DLD is only authorized one ASI 3C operational contract support specialist, that requirement could be spread through the entirety of the four-man logistics cell in order to do split-based operations. In addition, the single transportation management coordinator (88N) must maintain currency in his/her field.

With the medics, The commander commented that they don't just need to be combat medics or basic medic trained, but need advanced medical training such as trauma training.

The fires specialist needs to ensure AFATDS, the Joint Deep Operations Coordination System, and Joint Fires Observer are operational and training is completed in order to conduct coordination of fires. The 13F fire support specialist billet is open; therefore, the 13-series officer and NCO must fill the gap and maintain proficiency on some of the 13F skills.

Finally, for military intelligence personnel, the Army Foundry Intelligence Training Program will pay for a lot of training, but not all. The goal is to send them to more specialized schools to keep the intelligence training current.

In closing, The commander noted, "although this is our very first field exercise and we are crawling, we are crawling pretty fast, we are still manned at about 50 percent. The past two weeks, we actually picked up our DRASHs, our environmental control units, our systems, inventoried them, and signed for them. We are doing a lot more with a lot less. I am really proud of the guys doing that. They worked really hard. Six months from now, we will have a whole host of issues to talk about."

Chapter 5

Digital Liaison Detachment Insights

“Any time you can get nations together to train together, we learn from each other. That interaction enhances our interoperability, enhances our readiness, and makes sure that we are better prepared to maintain the peace here in Europe.”

— MG Timothy McGuire, Deputy Commander, U.S. Army Europe, Saber Guardian 2017 Remarks



Saber Guardian 17

Exercise Saber Guardian 17 (SG17) was a U.S. European Command, U.S. Army Europe-led annual exercise that took place in Hungary, Romania, and Bulgaria in the summer of 2017. This exercise involved over 25,000 Service members from over 20 ally and partner nations. Some of the more notable aspects of SG17 include the massing of the 3rd Armored Brigade Combat Team, 4th Infantry

Division, from several locations across the Operation Atlantic Resolve area of operations to the exercise joint operations area (JOA) in Hungary, Romania, and Bulgaria, and the movement of 2nd Cavalry Regiment from Vilseck, Germany, to numerous locations throughout the JOA.¹

Supporting the Center for Army Lessons Learned (CALL) exercise collection efforts, Training and Doctrine Command Capabilities Manager/Mission Command/Command Post (TCM MC/CP)² observed and collected data during SG17 at the Novo Solo Training Area, Bulgaria, from 09-21 JUL 2017. The collection focused on subjects relating to digital liaison detachments (DLDs) and mission command interoperability. The following observations provide relevant insights on the conduct of the DLD during SG17. The observations are not all inclusive.

At SG17, the 230th DLD (Tennessee Army National Guard) deployed to the exercise location and augmented a Bulgaria mechanized brigade headquarters. The DLD operated in an analog mode with its multinational partners.

Division connectivity. The DLD is designed to operate at division level in a “digital” capacity. In those instances when the DLD operates below division level in analog mode, it is important for the DLD to keep digital connectivity/relationship with the division. The division-level connectivity provides up-to-date information flowing to DLDs that may further be used to populate an analog common operational picture (COP). Two skill sets and areas of training become important to the DLD with the observation above: Digital skills must be maintained with DLD personnel, and analog skills must be maintained by DLD personnel.

Insight: Ensure DLD personnel receive training to keep current on digital and analog skills. Specifically, more junior DLD personnel should be trained in analog areas (e.g., map skills). More senior personnel are advised to train on current or recent developments in technology.

DLD composition. The DLD was not deployed doctrinally, as noted by its support mission to a Bulgarian Army mechanized brigade headquarters assigned to Multinational Division-Southern Europe (MND-SE). The embedded staff augmentation role during SG17 reinforced the importance of U.S. Army-embedded personnel or a team serving side-by-side with their partner. Perhaps a separate organized embed team (with a dual role of functional subject matter expert and liaison officer) can be used for generating interoperability with non-digital partners and using DLDs in their doctrinal role at higher operational levels.

Insight: Deploy DLDs at a higher echelon (strategic or operational level and no lower than division level) to facilitate situational awareness and situational understanding with multinational partners. If teams from the DLD are required at lower echelons, they should be based on operational necessity and tailored to the mission in order to facilitate a multinational COP or digital fires.

Deployment Equipment Requirements. The DLD did not bring an Army Battle Command System and could not provide a digital COP or support digital fires between the Bulgarian brigade and the MND-SE higher command. Communications were done via chat, email, and telephone.

Insight: DLDs must deploy with a modified table of organization and equipment (MTOE) to provide full liaison capability and digital linkage with multinational partners.

Analog Requirements. All actions performed were analog. Members of the DLD had no or limited previous analog experience. They were able to learn and practice analog methods, a skill required for operations in a disconnected, interrupted, or limited bandwidth scenario. In addition, not all partners possess digital capabilities, so being able to understand analog processes better facilitates understanding partner operations.

Insight: DLD personnel require training not only with MTOE Army Battle Command System (ABCS), but require analog skills to fully understand multinational partners.

Organic Communications. At SG17, organic communications capabilities were discussed with leadership of the DLD. Senior personnel, to include the commanding officer and executive officer, agreed that organic communications equipment should not be made available to DLD units. They did not favor DLD organic communication equipment due to an increased footprint, additional personnel, associated communication equipment training, and additional coordination. The DLD leadership prefers to “fall in” on the communications equipment that is provided by host nation or current U.S. Army units on the ground. With no organic communications equipment, the DLD must coordinate with the gaining unit prior to arrival regarding communications equipment needs.

Insight: This subject may require further discussion among the DLDs. However, the SG17 DLD leadership did not desire to integrate a capability for organic communications equipment into the units. It may be a scenario where different DLDs, dependent on their role and partnership to multinational partners, desire more or less capability for organic communications equipment.

Language proficiency. Language issues hindered some of the DLD operations. Not all partners were fluent in English. Therefore, common understanding of current operations and staff planning efforts was at times challenging.

Insight: Deploy a linguist with the DLD who is fluent in the language of the multinational partner.

System cross-training. Interviews with several DLD personnel identified they individually took it upon themselves to become cross-trained on various ABCS. Medics learned Command Post of the Future (CPOF) and Advanced Field Artillery Tactical Data System (AFATDS), operators learned Tactical Airspace Integration System (TAIS), etc. This provided depth and agility for deploying section personnel as required for the mission.

Insights: The DLD is a small organization that would benefit with members being cross-trained on more than one ABCS system.

Awareness of DLD capabilities. The DLD is a critical element to facilitate situational awareness and situational understanding, the exchange of the COP, enabling digital fires, and coordination of sustainment capabilities with multinational partners at the strategic and operational levels. Many U.S. Army units are unfamiliar with what a DLD is and what it does (i.e., roles, responsibilities, and relationships) and therefore do not plan for proper use of the DLD early enough in the mission planning process.

Insights: Strategic messaging is needed to educate and inform leaders of the DLD capabilities present for the command and how to properly use the assets for success.

Planning for DLD utilization. Because the DLD is a small and unknown entity, there is a common misunderstanding across the U.S. Army of the DLD mission and purpose. This may lend itself to a wandering mission set for DLDs in the planning stages for exercises (and actual operations). If host nations do not understand the mission and purpose of DLDs, then relationships are more difficult to understand and encapsulate in an exercise scenario. In cases of little or no prior liaison for DLD familiarization, there is an increased time period for efficient performance of the DLD. Additionally, there is little to no understanding of the support a DLD will need upon arrival in the area of operations.

Insight: Additional strategic communications are needed on the DLD mission and purpose. Develop a “marketing plan” for describing the DLD mission and purpose to active duty units. The DLD conducts liaison to enable mission command and achieve unity of effort between U.S. Army forces and unified action partners, but few others in the U.S. Army know about the DLD. DLDs may need the following items for support upon arrival in an area of operations: linguistic support, security augmentation, logistics support, signal platoon support, and medical support.



Anakonda 16

Exercise Anakonda 2016 (AN16) was one of U.S. Army Europe's premier multinational training events that leveraged a Polish national exercise to train, exercise, and integrate Polish national command and force structures into an allied, joint, and multinational environment. The exercise involved more than 31,000 participants from 24 nations including Albania, Bulgaria, Canada,

Croatia, Czech Republic, Estonia, Finland, Germany, Hungary, Latvia, Lithuania, Macedonia, Poland, Romania, Slovakia, Slovenia, Spain, Sweden, Turkey, the U.K., and the U.S.³

During the exercise, the 244th DLD, Illinois Army National Guard; the 209th DLD from Wiesbaden, Germany; and the 2500th DLD from Vicenza, Italy, were assigned the mission to provide liaison capability between Lithuania, Hungary, and the Polish Brigade Headquarters and the 4th Infantry Division (4ID) to ensure communication, mutual understanding, and unity of purpose. The following observations document some of the unique issues and challenges experienced by the DLDs during the exercise.

Assignment of mission to DLDs. The DLD was assigned to participate in Anakonda six to seven months prior to the exercise, but the liaison mission with the 4ID and Polish Land Component Command (LANDCOM) was not locked until early April 2016, two months prior to execution. Two months is not adequate time between securing the mission and execution. Saber and Anakonda are biannual exercises, with Anakonda building on the lessons gained from Saber. This allows adequate planning time, tailoring the support to the operational needs and integration of the DLD into the exercise.

Insight: The DLD must be utilized during multinational exercises and programmed early within the planning cycle.

Liaison support to division headquarters. The 4ID served as a subordinate division to the Polish LANDCOM in Krakow during Phase I and then to Multinational Corps-Northeast (MNC-NE) during Phase II of the exercise. The Illinois Army National Guard's 244th DLD assigned a Digital Liaison Team (DLT) of five Soldiers to 4ID in order to provide digital liaison with the Polish 17th Mechanized Brigade in Warsaw during both phases. The doctrinal template had the U.S. and Polish forces in reverse roles, an orientation that reflected the reality for this theater. The Polish forces had developed digital systems comparable to the U.S. Army Command Post of the Future (CPOF); therefore, the DLT utilized the host nation's systems (Polish Mission Network, email, and telephone). These systems were unreliable and a COP could not be obtained. The DLT had no prior interaction with 4ID or the 17th Mechanized Brigade, but this did not adversely affect the operations.

Insight: Utilization of a DLT was valuable to the operations between the Polish 17th Mechanized Brigade and 4ID. In similar situations, this should be maintained. Integration of the DLT early in the planning would provide the DLT with clearer understanding of the operation, resolve any communication issues prior to the exercise, and aid both parties in identifying reporting requirements. At a minimum, the higher headquarters should have been given standard operating procedures to provide basic reporting requirements. Even with the Polish having comparable systems, the DLD systems could have filled the gaps when the Polish systems were down.

Liaison support to the Polish LANDCOM. The 244th DLD provided liaison between U.S. brigades and the Polish LANDCOM in Krakow during Phase I and then to MNC-NE during Phase II. The 244th DLD (headquarters and DLT+) was primarily utilized during Phase I as the agent to push taskings and information from LANDCOM to subordinate units and responses back. There was no digital requirement, as the unit utilized the Polish systems. Other than providing the 4ID commander's feedback during the daily brief in the event the video teleconference was inoperable, the DLD primarily provided liaison between the 4ID's subordinate brigades and LANDCOM rather than between the division headquarters and LANDCOM. As mentioned in the previous topic, there was no prior interaction between the DLD with 4ID or LANDCOM. This did not adversely affect the operations. As 4ID belonged to LANDCOM solely during Phase I, the DLD had no requirements during Phase II, which were not identified until three days prior to the transfer of authority. The DLT remained with the Polish 17th Mechanized Brigade while the remainder of the force sought out a mission and secured training opportunities with MNC-NE by pairing with its warfighting functions.

Insight: Planning conferences should have identified any requirements for a DLD after Phase I and retasked them where needed. DLD doctrine must provide insight on the utilization of the DLD when the U.S. is the subordinate unit.

Knowledge management. Material utilized and products developed during the exercise were not retained post exercise. The operational security requirement by Poland did not allow capturing lessons learned or other information to aid in future DLD development.

Insight: Within operational security requirements, methods must be put into place to capture the lessons learned for future DLD operations. It must be considered whether the current system on the DLD MTOE adequately provides the requisite tools to meet the requirement.

The following are additional insights on the utilization of the 244th DLD during AN16:

- A DLD should have been assigned to liaison between MNC-NE and LANDCOM providing the connection between the NATO systems and the Polish Mission Network, then between MNC-NE and its subordinate divisions.
- If the task organization during Anakonda is the template utilized in a true operation, it would be critical to habitually train in that manner. This allows for identifying and reducing any disconnects that would adversely affect the operation.

Endnotes

1. <http://www.eur.army.mil/SaberGuardian/>
2. TCM MC/CP is a subordinate organization to the Mission Command Center of Excellence (MCCoE), Capabilities Development and Integration Directorate (CDID).
3. <http://www.eur.army.mil/anakonda/>

Chapter 6

Recommendations

The following recommendations offer some potential solutions to improve unified action partners' (UAPs') interoperability, leveraging digital liaison detachments (DLDs) as enablers.

- Emphasize liaison officer (LNO) capabilities with personnel authorizations, specialized training, and mission command equipment (radios and mission command information systems). LNOs continue to be an effective means of direct unit-to-unit interface at the appropriate tactical level for conducting planning, coordination, synchronization, and integration of UAPs. Specialized training is required such as cultural, language (especially if conducting regionally aligned forces missions and/or security assistance training), and familiarization with the UAP decision-making process. Consider developing a language translator application that provides real-time translations of voice/text for the most common languages. The application uses regional etymology and UAP common terms and definitions.
- Develop and implement a standard mission partner environment (MPE) framework. The shift to the MPE reduces barriers that exist between a U.S.-only network and individual coalition partner networks. An MPE framework will allow joint, interorganizational, and multinational mission partners to be on the same mission classified data network (filtered to accommodate the multinational, interagency, and intergovernmental security settings) to receive common data services, and to more effectively conduct planning, coordination, and synchronization as one mission partner team. The Army should improve the capability for a shared and tailorable common operational picture (COP). This should be done between mission partners to include classified information, unclassified information, or nonclassified information by developing a releasable COP that allows the MPE framework to rapidly share (via automated means) COP information that is releasable and viewable to the level of classification of the intended recipient. In addition, the Army must ensure mission command information systems (MCISs) operating on the network are built and certified to be fully joint information environment compliant.

- Improve the U.S. implementation of the Multilateral Interoperability Programme (MIP) to allow backwards compatibility with older versions of the MIP. The MIP provides exchange of basic COP data with the corresponding command nodes for military forces of other MIP member nations. Not all MIP member nations are on the same version of the MIP software, which creates an interoperability challenge between Army command nodes and the command nodes for military forces of other MIP member nations.
- Improve tactical radio cross-banding capabilities that allow cross-banding of U.S. tactical radios with those of UAPs. Tactical radios remain a primary means for tactical voice communications below brigade level. Radio cross-banding remains the current material solution until the development and fielding of a common secure coalition waveform.
- Develop a protected coalition unclassified voice over internet protocol cell capability. In working with coalition partners in developing nations, often the primary means of communications is unprotected cell capability. The ability to protect sensitive, but unclassified voice conversations with coalition partners would allow better coordination and synchronization with coalition partners, especially during stability operations and humanitarian assistance.
- Establish a common baseline for communications systems to integrate mission command system digital fires (i.e., Army Advanced Field Artillery Tactical Data System) capabilities.
- Deploy DLD teams doctrinally at operational and strategic levels to maximize their effectiveness.
- Deploy DLDs with their organic digital communications equipment so they will not have to rely on augmentation, or in worst case scenarios, have to resort to analog means.
- Execute mission command on one network with accessibility to all multinational partners in order to facilitate and sustain a coalition COP.
- Leverage all forms of liaison elements to bolster improved situational awareness and situational understanding with multinational partners, such as battlefield coordination detachments, United States Marine Corps Air Naval Gunfire Liaison Company, and the newly formed NATO Force Integration Unit. Establishing and maintaining effective communication with other liaison elements helps maintain the COP, improves integration, and enhances interoperability lines of effort.

- Establish and codify a primary, alternate, contingency, and emergency (PACE) plan in DLD unit standard operating procedures and/or a battle book, and rehearse the plan in training prior to deployment to improve analog skills. This is vitally important because, depending on the threat environment friendly forces may face in combat operations, there is a possibility that digital communications may be either jammed and/or degraded in the operational environment for periods of time. Developing individual and DLD team prowess with analog systems will allow uninterrupted support to the warfighter, without disrupting the battle rhythm.

Appendix A

Digital Liaison Detachment Functions, Locations, and Organizational Structure

- The detachment headquarters provides command, control, and coordination of the detachment's mission, training, administration, and logistical support; plans, coordinates, synchronizes, integrates, and provides force health protection to the detachment; and provides specific guidance to the teams for missions during liaison support to joint, allied, and coalition partners.
- The operations/maneuver team provides specific mission guidance and operational details for the teams when providing mission support; coordinates reporting to higher headquarters and adjacent units as required; maintains the situational status and common operational pictures; and determines and sets guidance for exchanging information with supported joint, allied, and coalition partners.
- The intelligence team provides and maintains the joint, allied, and coalition intelligence picture and determines the level of details that can be provided to supported units.
- The fire support team coordinates with joint, allied, and coalition counterparts for fires information and determines the level of fires information that can be shared.
- The logistic team coordinates with the supported units for additional support required and determines the deployment and redeployment schedules and coordinates those activities.
- The air and missile defense team coordinates with joint, allied, and coalition counterparts for air defense information and determines the level of information that can be shared.
- The signal team coordinates with the supported units for connectivity issues and concerns, sets communication thresholds as appropriate, and ensures that the digital connectivity is established so that joint, allied, and coalition partners can receive timely information to conduct operations.

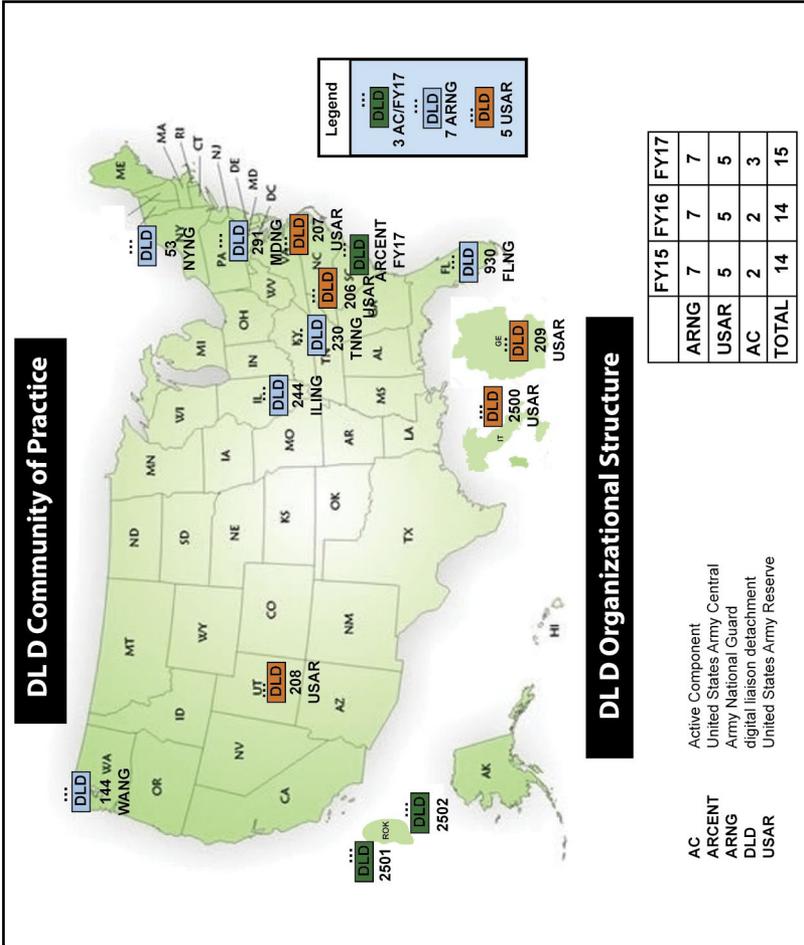


Figure A-1. Digital liaison detachment functions, locations, and organizational structure

Appendix B

The 144th Digital Liaison Detachment Battle Book

This battle book/standard operating procedure provides a way to conduct digital liaison detachment (DLD) operations to achieve interoperability while conducting coalition military operations. It is not all inclusive.

Introduction. The purpose of this battle book is to provide a foundation for DLD to conduct operations. This should be a living document where constant updates should be made.

Acknowledgement. The basis of this book is largely drawn from multiple DLD battle books.

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Section 101: Digital Liaison Detachment Overview

Purpose. This section provides an overview of the DLD

Proponent. Executive Officer

References. Army Techniques Publication 3-94.1, *Digital Liaison Teams*, (to be published in NOV/DEC 2017)

DLDs are assigned or attached to selected theater armies and Army Service component commands (ASCCs) for employment at theater army or for support at corps and division level to enhance common understanding (see Figure B-1). These teams provide an Army Forces (ARFOR) commander with the capability to conduct liaison with subordinate or parallel joint and multinational headquarters within the operational area (see Figure B-2). The core mission of the DLD is to enable mission command and achieve unity of effort between ARFOR and unified action partners. These teams are composed of 30 functional staff experts capable of providing advice and assistance to supported units and ensuring rapid and accurate communications between headquarters. DLDs have organic transportation. However, DLDs must receive communications support from theater army signal units. Although DLDs may have qualified linguists, they will need to be augmented with specific language capabilities. DLDs combine the capabilities of the previous Army liaison teams.

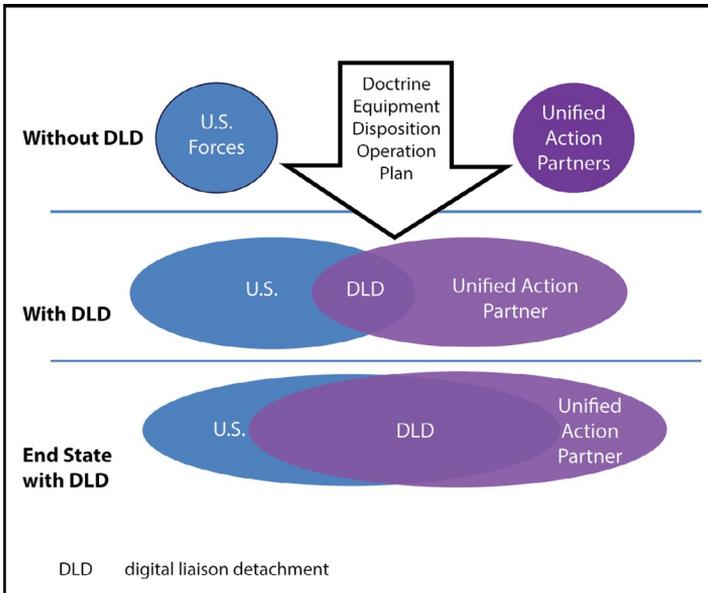


Figure B-1. Common understanding

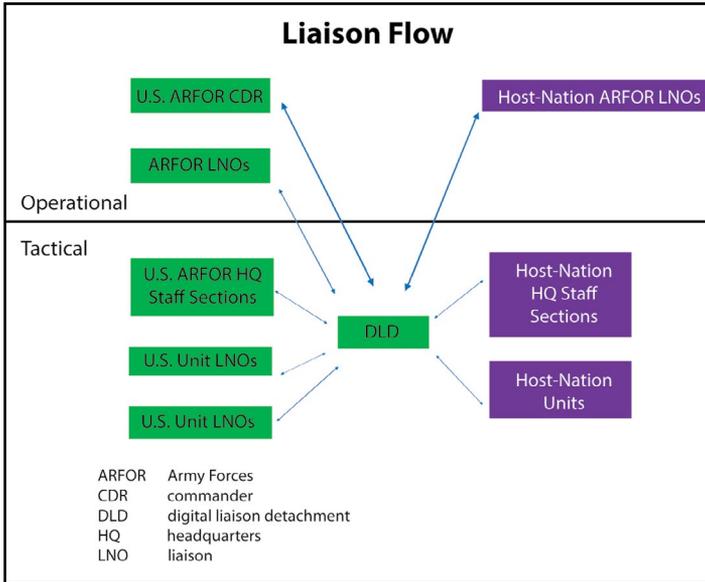


Figure B-2. Liaison information flow

When embedded with a host force, DLDs provide the core coordination center between a U.S. combatant commander and a parallel host-nation force. In this arrangement, the DLD would ideally be augmented by host-nation personnel to serve as a coordination center. The DLD commander or other senior liaison officer (LNO) would be the primary U.S. interface to a host-nation counterpart at the corps or Army level, and would manage the requirements and tasking flow into each of the respective headquarters. The respective chiefs of staff would then task staffs as appropriate for action and follow-up. The operations, intelligence, fires, air and missile defense (AMD), and logistics sections of the DLD could provide the core of an operations center and provide information exchange between all liaison officers and the G/C/J-2/3/4 sections of each respective headquarters to enable mission command through accurate situational awareness. The DLD would remain independent and collocated with its host-nation partner to provide in-person representation for the U.S. joint force commander and staff. The liaison coordination center implements the functions of collection

of information in support of current operations and the coordination of combat support and combat service support assets. The personnel manning the liaison operations center are responsible for ensuring all resources are in the right place at the right time. They must function effectively as a team in a sometimes fast-paced and austere environment. Each member of the coordination center must understand the overall function of the liaison operations center, and how they can individually and collectively contribute to the overall function.

The DLD provides digital liaison capability to Army units (theater army, corps, and division headquarters) for connectivity with allied and coalition force units and other U.S. Services. The DLD provides:

- Functional area expertise via liaison officers to joint and multinational headquarters
- Digital information management and communications interface capability for U.S. systems with a host headquarters
- U.S. headquarters representatives inside a supported coalition headquarters to facilitate mission command by clarifying orders, interpreting commander's intent to unified action partners, and identifying and resolving issues
- The host headquarters with Army experts on maneuver, fires, intelligence, sustainment, and air and missile defense
- Army Battle Command System (ABCS)

During the defense support to civil authority mission, the DLD can task-organize to conduct liaison activities between the State headquarters, joint task force headquarters, and other unified action partners.

LEADER'S GUIDE TO THE DIGITAL LIAISON DETACHMENT

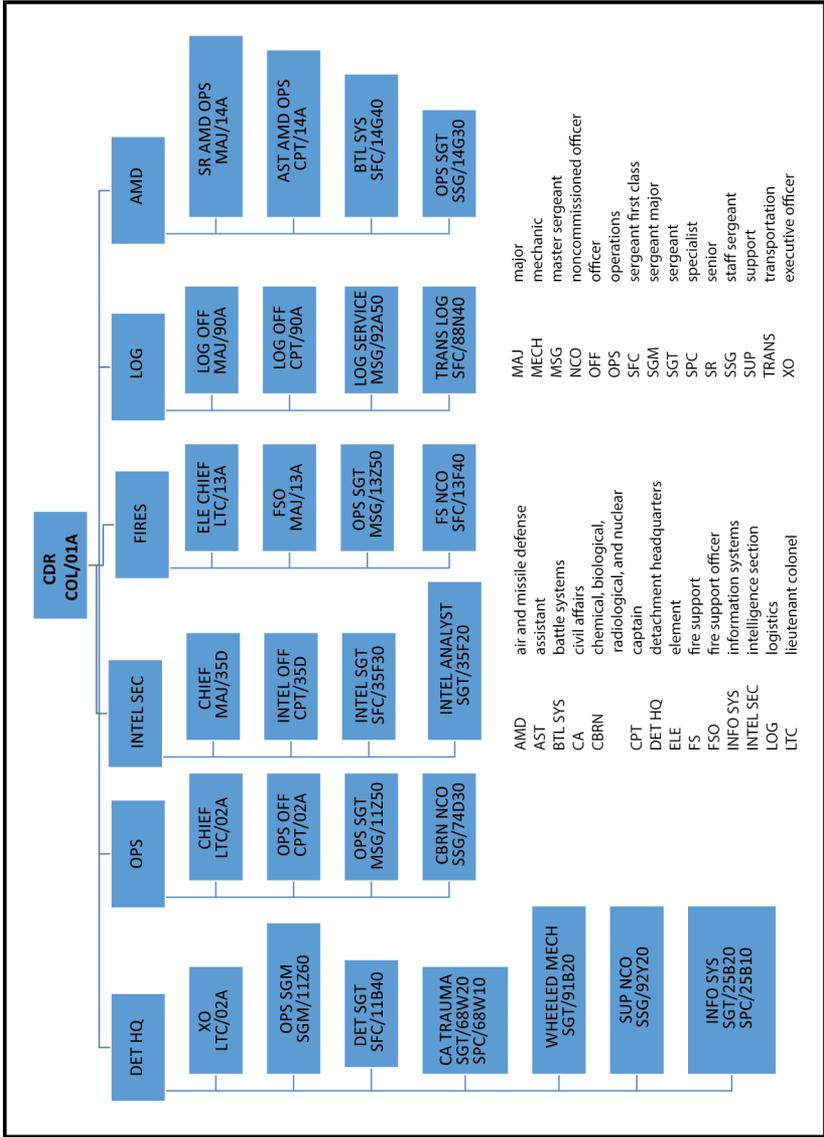


Figure B-3. DLD organization

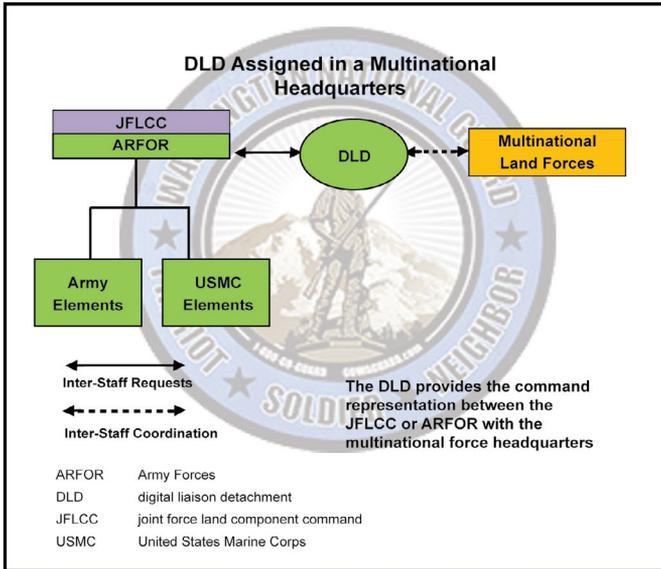


Figure B-4

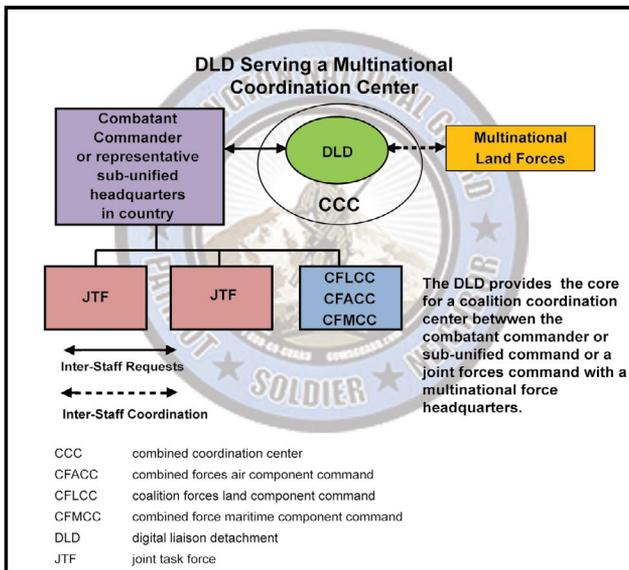


Figure B-5

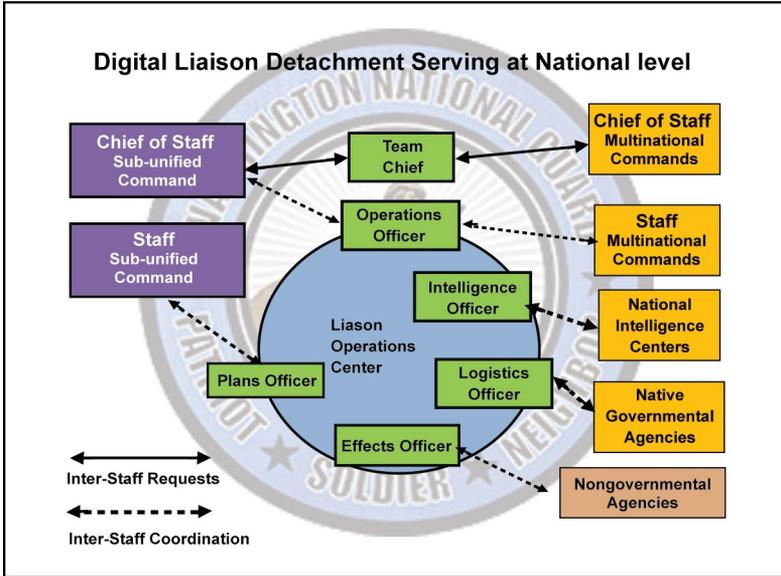


Figure B-6

Section 102: Liaison Activities

Office of Primary Responsibility: Headquarters

Liaison Activities

Liaison is that contact or intercommunication maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action (Joint Publication 3-08, *Interorganizational Cooperation*, 12 OCT 2016). Liaison helps reduce uncertainty. Most commonly used for establishing and maintaining close communications, liaison continuously enables direct, physical communications between commands. Commanders use liaison to enable mission command and achieve unity of effort during operations by facilitating communication between organizations, preserving freedom of action, and maintaining flexibility. Liaison provides commanders with relevant information and answers to operational questions, therefore enhancing the commander's confidence. Liaison facilitates communication of information related to the common operational picture and execution between the sending headquarters and the receiving headquarters. In addition to passing information, liaison personnel can add meaning and context to the information they send and receive. Liaison officers usually report to the chief of staff. (See Field Manual [FM] 6-0, *Commander and Staff Organization and Operations*, 05 MAY 2016)

Liaison activities augment the commander's ability to synchronize and focus combat power. They include establishing and maintaining physical contact and communication between elements of military forces and nonmilitary agencies during unified action. Liaison activities ensure the following:

- Cooperation and understanding between commanders and staffs of different headquarters
- Coordination on tactical matters to achieve unity of effort
- Synchronization of lethal and nonlethal operations
- Understanding implied or inferred coordination measures to achieve synchronized results

DLDs establish the liaison operations center. There are three basic liaison operations center functions:

1. Receive information.

- Receive messages, reports, and orders from subordinate units and higher headquarters.
- Monitor the tactical situation.
- Maintain a journal of all significant activities and reports.
- Maintain and update unit locations and activities.
- Monitor the enemy situation.
- Maintain the status of critical classes of supplies.
- Track the status of requests for information from supported units.

2. Distribute information.

- Submit reports to higher headquarters.
- Serve as a communications relay between units.
- Process and distribute information to appropriate units or staff sections.

3. Submit recommendations to the commander.

- Submit recommendations to the commander based on information available and analysis conducted.

Each of these functions is critical and interrelated. The order in which these functions occur may vary at times. These functions and tasks are not easily accomplished, nor can they be effectively accomplished by a single or small group of individuals. Each individual within the liaison operations center serves a role that ultimately contributes to the accomplishment of these functions. Before personnel can contribute, they must possess a clear understanding of the liaison operations center mission.

Section 103: Mission, Core Tasks, Mission Essential Task List

Office of Primary Responsibility: Headquarters

DLD Mission

Federal. The DLD conducts liaison to enable mission command and achieve unity of effort between Army Forces and unified action partners.

State. The DLD augments the homeland response force (HRF) command and control (C2) during domestic operations in order to support civilian agencies in response to chemical, biological, radiological, and nuclear (CBRN) events or natural disasters. The following are DLD core tasks:

- Establish a liaison presence between the assigned headquarters and host headquarters.
- Develop cross-functional (operations, intelligence, fires, logistics, and air defense) rapport with unified action partner agencies, as required.
- Develop rationalization and standardization agreements as required to facilitate staff interaction between unified action partners.
- Act as the forward information exchange and coordination center for joint forces.
- Conduct rapid assessment and coordination of operational situations between headquarters.
- Move information between assigned unit headquarters, supported, and adjacent unit headquarters.
- Represent the supported host headquarters inside the assigned headquarters.
- Provide project and program liaison support, as required.
- Provide continuity between staff rotations to preserve momentum of current and future operations.

The following are METLs with supporting collective tasks:

- Conduct expeditionary deployment operations in support of the offense, defense, stability, and defense support of civil authorities. (55-CO-4830)
 - Perform predeployment supply activities. (10-CO-4804)
 - Perform predeployment maintenance activities. (43-CO-4805)
 - Conduct troop-leading procedures for companies. (71-CO-5100)
 - Provide digital liaison to unified action partners for detachments. (71-DET-0001)
 - Conduct foreign disclosure procedures for detachments. (71-DET-0003)
 - Support the mission command operations process for detachments. (71-DET-5100)
 - Conduct command post operations for detachments. (71-DET-5200)
 - Provide the common operational picture for detachments. (71-DET-5316)
 - Integrate situational understanding through knowledge management for detachments. (71-DET-5330)
 - Employ operational security measures for detachments. (71-DET-6111)
 - Integrate network operations for detachments. (71-DET-7255)
- Provide liaison to unified action partners for detachments. (71-DET-0002)
 - Provide warfighting function support to forces for detachments. (71-DET-0004)
 - Integrate linguistic support to a foreign military headquarters for detachments. (71-DET-3170)
 - Coordinate support for partner unit for detachments. (71-DET-4100)
 - Support the mission command operations process for detachments. (71-DET-5100)

- Process relevant information for detachments. (71-DET-5315)
- Provide the common operational picture for detachments. (71-DET-5316)
- Conduct security force assistance for detachments. (71-DET-5316)

The DLD provides the HRF C2 with trained personnel to augment in the areas of operations, planning, logistics, communications, and personnel support. The DLD also provides personnel to act as liaisons and medics. DLD Soldiers will train on the following collective tasks to support the 10th HRF's mission:

- Conduct intratheater deployment and redeployment of forces within the joint operations area (Operational Level [OP] 1.1.2):
 - CBRN consequence management command and control (Marine Corps Task 6.4.5.1)
 - Conduct Tactical Deployment/Redeployment Activities (Army Tactical Task [ART] 1.1.2)
- Provide C2 (OP 5):
 - Conduct tactical deployment/redeployment activities. (ART 1.1.2)
 - Provide operational sustainment. (OP 4)
 - Provide logistics support. (ART 4.1)
 - Provide personnel support. (ART 4.2)
 - Conduct composite risk management. (ART 6.10.1)
 - Integrate information. (OP 5.1)
 - Conduct command post operations to support tactical operations. (ART 5.2.1)
 - Establish the information network and information systems. (ART 5.3.3)

Section 104: Headquarters Section

Office of Primary Responsibility: Headquarters

Headquarters Section. The headquarters section provides mission command to the DLD. The headquarters section ensures all administrative functions pertaining to the overall operation of the DLD are planned, coordinated, and executed. The headquarters section establishes contact with the host headquarters to coordinate administrative matters.

Headquarters Section Functions

The functions of the headquarters section include, but are not limited to the following:

- Organize the sections of the DLD for conduct of daily operations.
- Ensure all incoming messages routed to the DLD are screened and distributed to the appropriate sections.
- Ensure all outgoing messages are in the proper format and file copies are retained in the journal.
- Reproduce and disseminate documents to various other sections.
- Provide administrative, maintenance, and medical support as needed.
- Collect log journals from each DLD section and maintain the official historical file.
- Coordinate with the host organization for support.
- Maintain accountability of DLD personnel.
- Coordinate signal support provided to the DLD.
- Deploy, connect, and support organic communications, the Army Battle Command System (ABCS), S and other equipment into operating configurations.
- Develop and maintain a common operating picture, tracking DLD operations and requirements.

Commander. The DLD commander is the senior Army liaison officer at a multinational or other unified action partner headquarters. The commander has the responsibility of personally representing the commander, Army Forces (COMARFOR) and coordinating his interests with the host commander. The relationships between the DLD commander, COMARFOR, host commander, and other Service and coalition representatives is critical. A major component of a well executed liaison plan is the trust built through close personal relationships. The art of liaison

is to build and maintain this trust and confidence. The DLD commander should be joint professional military education Phase 2 qualified in order to liaise with other government agencies, foreign governments, nongovernmental organizations, and multinational or other unified action partners. The DLD commander's responsibilities include the following:

- Establish the DLD.
- Integrate and synchronize ARFOR operations, intelligence, fires, AMD, and logistics assets with those of the host command.
- Ensure ARFOR operations are supported by coordinated planning and execution with the host command.
- Effectively integrate additional liaison personnel provided by the ARFOR, joint service, and coalition force headquarters into the DLD.
- Ensure effective liaison takes place.
- Integrate and synchronize ARFOR operations, intelligence, fires, AMD, and logistics assets with those of the host command.
- Advise both the COMARFOR and the unified action partner commander regarding coordination activities.
- Build a working environment that supports the COMARFOR priorities and causes the host commander to seek out the DLD commander's advice.
- Work closely with the ARFOR commander, chief of staff, and G-3.

Executive officer. The DLD executive officer performs duties assigned by the DLD commander. Some of the duties of the DLD executive officer include the following:

- Supervise the DLD in the absence of the commander.
- Serve as the unit foreign disclosure officer.
- When conducting split detachment operations, serve as the senior ARFOR liaison officer to the host command.
- Provide supervision over teams or functions of the DLD as specified by the DLD commander.

Chief operations sergeant (sergeant major). The chief operations sergeant is assigned duties by the DLD commander as both his senior enlisted advisor and the senior operations sergeant of the DLD. The chief operations sergeant or sergeant major should complete the Joint Personnel Recovery Agency and Personnel Recovery Managers Course. The duties and responsibilities may include the following:

- Serve as the senior enlisted liaison noncommissioned officer (NCO) to the host command.
- Supervise establishing of DLD operations.
- Establish shift plans in the teams.

Detachment sergeant. The detachment sergeant performs duties assigned by the commander for the conduct of DLD activities, which include the following:

- Perform internal personnel and administration tasks of a unit first sergeant and supervise headquarters section personnel.
- Supervise administration and logistics for the DLD.
- Coordinate DLD life support needs with the host command.
- Help establish communications and automatic data processing links with designated headquarters.
- When conducting split detachment operations, serve as the senior enlisted liaison NCO to the host command.

Unit supply sergeant. The supply sergeant performs duties assigned by the chief operations sergeant or sergeant major for the conduct of DLD activities. These supply duties include the following:

- Responsible for the overall supervision of DLD unit supply and performs duties involving requests, receipt, storage, issue, accountability, and preservation of individual, organizational, installation, and expendable supplies and equipment.
- Establishes and maintains property accountability procedures for the DLD.

Wheeled vehicle mechanic. The wheeled vehicle mechanic is responsible for performing preventive checks and services on all assigned equipment in the DLD. The wheeled vehicle mechanic duties include the following:

- Provides and coordinates training to ensure all Soldiers are trained on performing operator-level maintenance on assigned vehicles.
- Performs duties as master driver for the DLD.
- Advises the DLD commander on all maintenance issues in the DLD.
- Maintains a power generator and its associated equipment.
- Provides training on proper operation on all power supply equipment in the DLD.
- Ensures vehicles and associated equipment is prepared for deployment in support of all DLD operations.
- Requests necessary repair parts.
- Augments supported headquarters maintenance facility when not required at the host location.

Trauma specialists. The trauma specialists are responsible for all medical operations and equipment within the detachment to include the following:

- Supervise and oversee all medical activities within the detachment.
- Provide and coordinate training for all combat lifesavers in the unit.
- Maintain adequate medical support for the entire unit.
- Receive, distribute, and maintain adequate medical supplies needed in support of all operations.
- Routinely conduct inventories, inspections, and preventive maintenance checks and services on all medical equipment assigned to the unit.
- Supervise the medical evacuation plan during all operations.
- Coordinate with the host unit in resolving medical issues for DLD personnel.
- Augment the supported headquarters medical facility when not required at host location.

Senior information systems specialists. The information systems specialists' primary responsibility is to establish and troubleshoot the communications-electronic links from the DLD to the ARFOR and other designated agencies. These personnel also serve as drivers for the DLD commander and deputy. Vital to performing these duties is having the following experience or training:

- Army Global Command and Control System (AGCCS)
- ABCS
- Associated software protocols
- Responsibility for scheduled and unscheduled maintenance on all ABCS and associated equipment
- Ability to provide and coordinate training to ensure all Soldiers are trained on necessary software and assigned ABCS hardware.
- Advising the DLD commander on all information systems issues in the DLD.
- Ensuring that ABCS equipment is prepared for deployment in support of all DLD operations.
- Assisting in performing preventive maintenance checks and services on wheeled vehicles and associated equipment in the DLD.

Section 105: Operations Section

Office of Primary Responsibility: Operations

Operations and maneuver section. The DLD operations and maneuver section consists of maneuver personnel who collocate with current and/or future operations personnel of the host command. The operations section also monitors the host plans cells. The team ensures that host current operations are synchronized with current ARFOR operations. The team employs digital information systems to support the coordination and execution of current operations including a digital update of current situation graphics. Functions of the operations and maneuver section include, but are not limited to the following:

- Monitor execution of the host command's current and future operations in regard to planned ARFOR land force operations.
- Obtain the current friendly ground force situations from the ARFOR G-3 operations sections.

- Interpret the enemy and friendly ground forces situation (maintain current situation map) for the host, if necessary.
- Inform the host operations division of significant changes in ARFOR operations, objectives, and priorities.
- Provide other liaison officers in subordinate units of the host with periodic updates on the current situation.
- Coordinate and synchronize current ARFOR aviation and deep strike (airborne, air assault, attack aviation) operations with the host combat operations.
- Represent COMARFOR interests during planning meetings with the host plans cell.
- Brief the host plans cell on the COMARFOR's intent and planned concept of operation.
- Provide recommendations to the host command based on knowledge of U.S. and host doctrine.

Operations and maneuver section chief: The operations and maneuver section chief of the DLD is the senior Army representative to the host current operations cell. This job most closely resembles that of the current operations officer on a corps staff. The operations officer should complete the Joint Planners Course Additional Skill Identifier (ASI) 3H and the Joint, Interagency, and Multinational Planners Course. Primary duties include the following:

- Update the host current operations cell on the current friendly and enemy operations, scheme of maneuver, targeting concept, and priorities.
- Monitor execution of all ARFOR operations.
- Facilitate coordination of host and ARFOR current and other operations.
- Ensure ground operations and order of battle maps are current.
- Brief the host command group on current and future ARFOR operations.

The operations officer normally performs duties as the night shift operations officer. These duties are the same as the operations section chief when deployed separately.

Senior operations NCO. The senior maneuver operations NCO is responsible for maintaining the current operations situation displays (maps, charts, computer graphics, etc.) pertaining to current and planned offense, defense, and stability operations. These responsibilities require an ASI of 2S, battle staff NCO, completion of antiterrorism officers Level 2 training, and expertise in ABCS. The primary responsibility is the maintenance of the common operational picture and host-friendly situation map. Responsibilities also include the following:

- Produce, revise, and post current operational graphics to include those required for offense, defense, and stability operations.
- Ensure commonality between all maps and displays in the DLD.
- Maintain a log of all changes made to a host and ARFOR unit locations and graphics.
- Post all spot reports of significance on the operations maps and displays.
- Assist the operations officer in monitoring host unit operations, situations, and locations, as required.
- Assist the operations officer in monitoring and posting host-unit relative combat power for inclusive in-command briefings.

CBRN operations NCO. The CBRN operations NCO performs duties assigned by the senior maneuver operations NCO and acts in place of the senior maneuver operations NCO in his absence or when conducting split detachment operations. The CBRN NCO is responsible to the commander for the overall supervision of unit CBRN activities and preservation of individual or organizational CBRN supplies and equipment. This NCO is also responsible for providing CBRN expertise to the host command and submitting CBRN reports, as required. These responsibilities require an ASI of 2S, battle staff NCO, and expertise in ABCS.

Section 106: Fires Section

Office of Primary Responsibility: Fires

Fires section. The DLD fire support section consists of field artillery personnel that collocate with the fires and artillery personnel of the host command. The section ensures that host fire support is synchronized with current Army combat operations. The section takes actions to integrate use of lethal and nonlethal fires into current operations and plans for future operations. Digital information systems support the coordination and execution of fire support including digital update of current fires graphics. Functions of the fire support section include the following:

- Coordinate changes to the fire support coordination line and other fire support coordination measures (FSCMs) with the host staff.
- Pass host command requests for immediate Army Tactical Missile Systems and other support to the ARFOR fires cell.
- Coordinate and synchronize ARFOR precision strike operations with the host fire support.
- Coordinate with ARFOR electronic warfare planners in the integration of electronic warfare with the host command.
- Deconflict the host command proposed changes beyond the fire support coordination line with friendly forces (for example special operations forces) forward of the forward line of own troops and with restrictive FSCMs (protected and restricted targets).

Fires section chief. The fires section chief of the DLD is the senior Army representative to the host fire support cell. This job most closely resembles that of the fire support coordinator on a corps staff. The fires section chief should complete the Joint Planners Course ASI 3H; the Joint, Interagency, and Multinational Planners Course; and Joint Operational Fires and Effects Course. Primary duties include the following:

- Update the host fire support section on the current friendly and enemy operations, status of the Army Tactical Missile System, and development of the designated target lists and fire support priorities.
- Monitor execution of ARFOR and host fires.
- Facilitate coordination of host and ARFOR lethal and nonlethal fire support.
- Ensure ground operations and order of battle maps are current.
- Brief the host fire support section on current and future ARFOR lethal and nonlethal fires.

Fire support officer. A fire support officer normally performs duties as the night shift fire support officer. His duties are the same as the fire support section chief when conducting split detachment operations.

The senior fire operations sergeant supervises the day-to-day operations in the section. This Soldier is responsible for the setup and operation of the section. The responsibilities require an ASI of F9, Advanced Field Artillery Tactical Data System (AFATDS) operator or supervisor. The fire support officer duties include the following:

- Set up the map board depicting the current friendly situation.
- Establish communication links with the ARFOR G-3 current operations cell and fires cell.
- Help coordinate all FSCMs with the host, including changes to current FSCMs.
- Monitor host compliance with FSCMs.
- Operate the following systems:
 - AGCCS
 - ABCS
 - Contingency Theater Air Control System Automated Planning System
 - AFATDS

Fire support NCO. The fire support NCO performs duties assigned by the senior fire operations sergeant. This Soldier acts in place of the senior fire support NCO in his absence or when conducting split detachment operations. These responsibilities also require an ASI of F9, AFATDS operator or supervisor.

Section 107: Intelligence Section

Office of Primary Responsibility: Intelligence

Intelligence section. The DLD intelligence section serves the DLD commander, all DLD teams, and the host command to which the DLD is liaison as a one-stop land operations intelligence liaison. This structure benefits from unity of direction and training under a single senior military intelligence officer. Digital information systems support the exchange and coordination of intelligence data and requirements, including update of planning and operational graphics. The intelligence function of the DLD is that of liaison and coordination, not that of analysis. The DLD intelligence section collocates with intelligence personnel of the host. The section supports the host as required in execution of its functions. In cases where the host staff lacks qualified personnel, the intelligence section will perform additional duties as required and train selected host staff to assume those duties. All personnel within the section will need courier cards and, if possible, will be qualified as foreign disclosure officers. DLD intelligence functions may include, but are not limited to, the following:

- Support the host in target validation and refinement for all missions involving the ARFOR.
- Support the operations team coordination with the host operations section on immediate requests for information collection.
- Relay real-time significant intelligence information received by collection platforms from all intelligence disciplines.
- Coordinate emerging targets information with the ARFOR tactical operations center.
- Keep the operations section informed of the targets.
- Get the most current enemy ground force situations from the ARFOR G-2 operations section.
- Interpret the enemy ground forces situation for the host, and inform the other DLD teams of apparent changes in enemy operations, objectives, and priorities.
- Exchange information to answer combat assessment and battle damage assessment questions.
- Help the host intelligence cell integrate COMARFOR requirements for intelligence collection their requirements.

- Obtain priority intelligence requirements, collection plans, targeting data, and 24- to 96-hour enemy situation reports to deconflict or synchronize collection plans between the COMARFOR and the host command.
- Coordinate and conduct reachback to national-level intelligence agencies, if necessary.
- Collaborate with higher and adjacent units in intelligence operations.
- Forward allied or host-intelligence reports to higher, adjacent, and other relevant units.
- Obtain releasable intelligence reports for disclosure to host staff.
- Assist in battlefield analysis and provide recommendations to the host command and the DLD operations section based on knowledge of the operational situation.

The following are available resources and capabilities the DLD intelligence section can provide:

- Distributed Common Ground System–Army (DCGS-A) (SECRET Internet Protocol Router Network or Nonsecure Internet Protocol Router Network)
- ArcGIS
- Joint Effects Model Increment 2
- Command Post of the Future (CPOF)

Intelligence section chief. The intelligence section chief supervises the overall activities and training of the intelligence section. This officer ensures intelligence liaison is established with the intelligence staff of the host command. This officer also ensures intelligence support is provided to all DLD teams. The intelligence section chief coordinates activities to ensure there is flow of intelligence and information between the DLD and other intelligence organizations. If required, this officer provides host intelligence input to joint targeting needs.

Intelligence officer. The intelligence officer assists the intelligence section chief and performs the duties of the intelligence section chief when absent. The intelligence officer ensures information flow between the intelligence section of the supported ARFOR and host command to include providing enemy ground order of battle.

Intelligence officer duties include the following:

- Facilitate the flow of information to help the host command with target intelligence development.
- Interpret the enemy ground order of battle for the intelligence section of the host command.
- Track the current enemy situation.
- Assist the host threat officer with current ground forces intelligence, tracking, and analysis.
- Maintain access to theater and national collection platforms tracks to validate key targets.
- Help analyze and confirm emerging targets with the host and/or ARFOR intelligence staff.

Senior intelligence NCO. The senior intelligence NCO supervises the day-to-day intelligence operations. The intelligence NCO performs duties as assigned by the senior intelligence officer. These responsibilities require an ASI of 2S, battle staff NCO, and expertise on DCGS-A and ABCS. The senior intelligence NCO duties include the following:

- Maintain the intelligence common operational picture (digital or map overlay) depicting current enemy situation and communications links between the ARFOR and host command.
- Coordinate current intelligence with the DLD operations section.
- Access ARFOR intelligence using a multifunctional workstation, DCGS-A, or TROJAN SPIRIT-Lite.
- Coordinate map requests to support the DLD mission.
- Supervise the section intelligence analyst.

Intelligence analyst. The intelligence analyst performs duties under the supervision of the senior intelligence sergeant. This officer acts in place of the senior intelligence NCO in his absence or when conducting split detachment operations. The intelligence analyst duties include the following:

- Post enemy information (digital or map overlay).
- Maintain a local enemy ground order of battle database or file.
- Plot all enemy movement and actions.
- Maintain all information related to the enemy

- Maintain the intelligence workbook and journal.
- Assist host-intelligence staff analysis of emerging targets supporting ARFOR ground operations.

Section 108: Logistics Section

Office of Primary Responsibility: Logistics

Logistics section. The DLD logistics section serves the DLD commander, all DLD sections, and the host command to which the DLD is liaison as a one-stop COMARFOR logistics liaison. This structure benefits from unity of direction and training under a single senior logistics officer. Digital information systems support the exchange and coordination of logistics data and requirements, including updates of planning and operational graphics. The logistics function of the DLD is that of liaison and coordination, not that of direct support. The DLD logistics section collocates with logistics personnel of the host command. DLD logistics functions include the following:

- Support the host command in logistical and transportation planning and refinement for all missions involving the ARFOR.
- Support the DLD operations team coordination with the host operations section on immediate requests for resupply.
- Coordinate emerging host sustainment challenges with the ARFOR G-4 and supporting theater sustainment command or expeditionary sustainment command.
- Keep the DLD operations section informed of host sustainment status.
- Exchange information with the ARFOR G-4 and supporting theater sustainment command or expeditionary sustainment command to answer logistics assessment questions.
- Help the host logistics section request and integrate COMARFOR sustainment support for their requirements.
- Assist the host command with transportation movement planning to include deployment and redeployment planning.

Logistics section chief. The logistics section chief supervises the overall activities and training of the logistics section. This Soldier ensures logistical coordination is established with the logistics staff of the host. This Soldier works jointly with the headquarters supply NCO to ensure sustainment support is provided to all DLD teams. The logistics section chief coordinates activities to ensure the flow of logistics information between the DLD and other ARFOR logistical organizations. This officer prepares and presents logistics briefings as needed. The logistics section chief should complete the Joint Planners ASI 3H; Joint Logistics Course; and the Joint, Interagency, and Multinational Planners Course. If required, this Soldier provides host logistics input to the ARFOR sustainment planning. The logistics section chief should complete the Theater Sustainment Planners Course and the Joint Logistics Course.

Logistics officer. The logistics officer normally performs duties as the night shift logistical officer. His duties are the same as the logistics section chief when conducting split detachment operations. The officer serves as the unit movement officer and Command Maintenance Discipline Program/Command Supply Discipline Program officer for the DLD.

Senior logistics NCO. The senior logistics NCO supervises the day-to-day section operations. This officer is responsible for setup and operation of the logistics section to include the following:

- Maintains the logistics situation (digital or map overlay) depicting current and planned friendly sustainment situation and data and communications links between the ARFOR and the host command using the Battle Command Sustainment Support System.
- Maintains liaison with host logistical counterparts to keep abreast of the current logistical situation.
- Prepares logistical reports.
- Supervises the transportation NCO.
- This NCO may be tasked to brief senior officers and visiting dignitaries regarding logistics activities and status.

Transportation NCO. The transportation NCO performs duties under the supervision of the senior logistics NCO. This officer helps the senior logistics NCO with the setup and operation of the logistics section to include the following:

- Plans and coordinates the movement of the DLD.
- Posts significant logistical information (digital or map overlay).
- Maintains the logistics workbook and journal.

- Assists host intelligence staff analysis of emerging targets supporting ARFOR ground operations.
- Assists the host with transportation movement planning to include deployment and redeployment planning.

Section 109: Air and Missile Defense Section

Office of Primary Responsibility: Air and Missile Defense

Air and missile defense (AMD) section. The DLD AMD section coordinates COMARFOR air defense and air space management matters with the host plans and operations cells and the ARFOR air defense artillery (ADA) headquarters. Digital information systems support the exchange and coordination of air defense and airspace management information. The AMD section performs the following functions:

- Coordinate with the ARFOR air defense element and ADA brigade headquarters for the following:
 - Locations of ADA assets
 - Engagement reporting
 - ADA weapon engagement zones
 - Identification of friend or foe and selective identification feature procedures
 - Receipt of ADA annexes to operation plans or orders.
- Advise the host air defense commander on Army air defense matters appropriate to deconfliction of air support to ground operations.
- Coordinate the following with the control and reporting center :
 - ADA unit status
 - Changes in air defense warning
 - Weapons control status
 - Rules of engagement
 - Identification procedures
 - Early warning and tactical ballistic missile alert procedures

- Advise the senior air defense officer in the host headquarters of Army air defense status to include placement of ADA weapons in direct support of joint and multinational land forces.
- Provide the host ADA commander with the U.S. area air defense commander's intent.
- Coordinate with the ARFOR theater missile defense cell for tactical ballistic missile alert dissemination procedures.
- Exchange ADA operational data with host counterparts.
- Coordinate ADA airspace needs with the host airspace management section.
- Support integration of the COMARFOR AMD plan with the host counterair effort.

AMD section chief. The AMD section chief of the DLD is the senior Army representative to the host air defense section. This job most closely resembles that of the AMD coordinator on a corps staff. The AMD section chief should complete the Joint Planners ASI 3H; the Joint, Interagency, and Multinational Planners Course; and Tactical Air Operations Course ASI 5U. The AMD section chief's primary duties include the following:

- Update the host air defense section on the current friendly and enemy operations, AMD plans, and defended asset priorities.
- Monitor execution of ARFOR and host air and missile defense.
- Facilitate coordination of host and ARFOR air defense.
- Brief the host air defense section on current and future ARFOR AMD operations.

Assistant AMD operations officer. Assistant AMD operations officer normally performs duties as the night shift AMD officer. His duties are the same as the AMD section chief when conducting split detachment operations and should complete the Tactical Air Operations Course ASI 5U.

Senior AMD operations sergeant. The senior AMD operations sergeant supervises the day-to-day operations in the section. This officer is responsible for the setup and operation of the section. The responsibilities require expertise with the Air and Missile Defense Workstation (AMDWS) as operator or supervisor and should complete Tactical Air Operations Course ASI 5U. The senior AMD operations sergeant duties include the following:

- Set up the map board depicting the current friendly AMD situation.

- Establish communication links with the ARFOR G-3 AMD section.
- Help coordinate all airspace control measures with the host command, including changes.
- Monitor host compliance with weapons control status and airspace control measures.
- Operate the following systems:
 - AGCCS
 - ABCS
 - AMDWS

AMD operations sergeant. The AMD operations sergeant performs duties assigned by the senior AMD sergeant. This officer acts in place of the senior AMD sergeant in his absence or when conducting split detachment operations. These responsibilities also require expertise with AMDWS as operator or supervisor.

Section 110: Staff Products

Purpose. To provide a general guidance on product generation.

Proponent. Operations

Each section needs to generate and update individual staff estimates through the operation. In general, staff estimates are the foundation of building an operation summary report. The senior LNO will determine the final format and information requirement for various DLD products.

Basic format for an operation summary:

- a. Higher mission
- b. Supported commander's priorities for the next 24 to 72 hours
- c. Current assessment/operational impact (what this means)
- d. Last 12/24 hours (using task and purpose format)
- e. Next 24 hours (using task and purpose format)
- f. Enemy situation
- g. Combat power

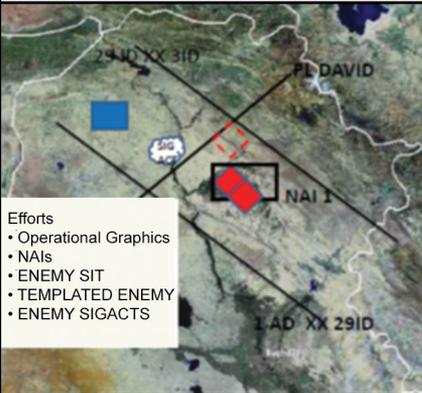
MCWS/CPOF CUB EXAMPLE	
	Supported Unit Mission Statement Supported CDR's priorities
	Situation Summary Last 12/24 hours (by subordinate unit, task, and purpose) Next 12/24 hours (by subordinate unit, task, and purpose)
Efforts <ul style="list-style-type: none"> • Operational Graphics • NAIs • ENEMY SIT • TEMPLATED ENEMY • ENEMY SIGACTS 	Combat Power Supply Status Route Status
	Current Assessment/Operational Impact Last 24 hours Next 24 hours Additional information, by exception
CDR commander CPOF Command Post of the Future CUB command update brief MCWS mission command workstation NAI named area of interest SIGACTS significant actions SIT situation	

Figure B-7. Sample command update brief slide

Section 111: Mission Command Workstation/Command Post of the Future

Purpose: This sections describes Mission Command Workstation (MCWS), also known as Command Post of Future (CPOF). It also describes naming convention and CPOF efforts, operational setup for CPOF, and basic operator checklist.

Proponent: Operations

References:

- Command Post Handbook, 2014
- CPOF Quick Reference Guide 1

General

CPOF is a decision support system that provides situational awareness and collaborative tools for tactical decision making, planning, and rehearsal and execution management from battalion through ASCC level.

CPOF is one of the main tools for the DLD to communicate and share information. Effort is one of the main functionalities of CPOF.

- Naming Convention:
 - Date-time group, section, focus (for example, “141800JUN14OPSUM”)
- Effort list. Efforts need to be consolidated to minimize the number of efforts on the effort list. For example, there should be separate significant activity efforts created by each of the subordinate units. These efforts need to be consolidated into one significant activity effort for the common operational picture.

Table B-1. Sample CPOF setup

Screen No. 1	Screen No. 2	Screen No. 3
Map Tree Viewer Relevant Efforts (i.e. Friendly Units, Operations Graphics, Enemy Situation)	Workspace	Chats Outlook

Table B-2. CPOF operator checklist

<input type="checkbox"/> Equipment Status <input type="checkbox"/> Network Status <input type="checkbox"/> Permission <input type="checkbox"/> SharePoint Site <input type="checkbox"/> Ventrilo Station/Head Phone <input type="checkbox"/> Voice Over Internet Protocol <input type="checkbox"/> CPOF Screen Setup <input type="checkbox"/> Map <input type="checkbox"/> Efforts <input type="checkbox"/> Outlook <input type="checkbox"/> Chat Room(s)

Section 112: Sample Battle Board

Office of Primary Responsibility: Operations

The purpose of a battle board (see Figure B-8) is to provide a ready reference for important and pertinent information in the liaison operations center. The composition of the battle board will be limited by space available in the liaison operations center.

Higher Mission Statement	Host Nation Higher Mission Statement	MAP	Higher Battle Rhythm	Network Status
Higher commander's Intent	Host Nation Higher Commander's Intent		Host Nation Battle Rhythm	Equipment Status
Priority Intelligence Requirement (PIR)	Host Nation PIR		Internal Rhythm	Shift Roster
Task Organization	Host Nation Task Organization			

Figure B-8. Battle board

Section 113: Area of Responsibility

Note: For this section, insert the coalition partners that are habitually supported in the area of responsibility.

Appendix C

Acronyms

The following acronyms and abbreviations are used throughout this guide.

ABCS	Army Battle Command System
ADDIE	analysis, design, development, implementation, and evaluation
ADP	Army Doctrine Publication
ADRP	Army Doctrine Reference Publication
AFATDS	Army Field Artillery Tactical Data System
ALT	Army liaison team
AMD	air and missile defense
AMDWS	Air and Missile Defense Workstation
AN16	Anakonda 2016
AR	Army Regulation
ARCENT	U.S. Army Central
ARFOR	Army Forces
ASCC	Army Service component command
ASI	additional skill identifier
ASRC	Army Synchronization and Resourcing Conference
ATN	Army Training Network

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BICES	Battlefield Information, Collection, and Exploitation System
C2	command and control
CAC	Combined Arms Center
CALL	Center for Army Lessons Learned
CATS	Combined Arms Training Strategies
CBRN	chemical, biological, radiological, and nuclear
CENTRIX	Combined Enterprise Regional Information Exchange
CFLCC	coalition forces land component command
COADOS	contingency operation for active duty operational support
COP	common operational picture
CPN	command post node
CPOF	Command Post of the Future
CSCT	combat support coordination team
DCGS-A	Distributed Common Ground Station-Army
DLD	digital liaison detachment
DLT	digital liaison team

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DOD	Department of Defense
DRASH	Deployable Rapid Assembly Shelter
DSCA	defense support of civil authorities
DTMS	Digital Training Management System
EXEVAL	external evaluation
FM	Field Manual
FSCM	fire support coordination measure
HMMWV	high-mobility multipurpose wheeled vehicle
HRC	Human Resources Command
HRF	homeland response force
ID	infantry division
IDT	inactive duty training
ITE	integrated training environment
JOA	joint operations area
JMEI	Joining, Membership, and Exiting Instructions
JNN	joint network node
JP	Joint Publication
LANDCOM	land component command

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LNO	liaison officer
LVCG	live, virtual, constructive, and gaming
MCCoE	Mission Command Center of Excellence
MCIS	mission command information system
MCTP	Mission Command Training Program
MET	mission essential task
METL	mission essential task list
METT-TC	mission, enemy, terrain and weather, troops and support available-time available and civil considerations
MIP	Multinational Interoperability Programme
MLT	mobile liaison team
MNC-NE	Multinational Corps-Northeast
MND-SE	Multinational Division-Southern Europe
MPE	mission partner environment
MTC	mission training complex
MTOE	modified table of organization

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MUTA	monthly unit training assembly
NCO	noncommissioned officer
NIPRNET	nonsecure internet protocol router network
OC/T	observer controller/trainer
ODT	overseas deployment for training
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OPFOR	opposing forces
PACE	primary, alternate, contingency, and emergency
PLL	prescribed load list
ROK	Republic of Korea
ROKA	Republic of Korea Army
SG17	Saber Guardian 17
SIPRNET	SECRET Internet Protocol Router Network
SME	subject matter expert
SOF	special operations forces
TAIS	Tactical Airspace Integration System

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TADSS	training aids, devices, simulators and simulations
TCM MC/CP	Training and Doctrine Command Capabilities Manager/Mission Command/Command Post
T&EO	training and evaluation outline
TOE	table of organization and equipment
UAP	unified action partner
USAEUR	U.S. Army Europe
USCENTCOM	U.S. Central Command
WfX	warfighter exercise
WTSP	warfighter training support package
XO	executive officer

Appendix D

Terms and Definitions

The following terms and definitions are used in this handbook.

Advanced Field Artillery Tactical Data System (AFATDS). Software used to plan, execute, and deliver lethal and nonlethal effects within the overall mission command and control enterprise. AFATDS interoperates and integrates with more than 80 different battlefield systems, including Navy and Air Force command and control weapon systems and German, French, Turkish, and Italian fire-support systems. (<http://asc.army.mil>)

Air and Missile Defense Warning System (AMDWS). A common defense/staff planning and situational awareness/situational understanding software tool that is deployed with air and missile defense (AMD) units at all echelons. The AMDWS performs all aspects of AMD force operations. It assists in the automated development of the intelligence preparation of the battlefield; provides situational awareness; and is capable of planning, coordinating, and synchronizing the air battle. (<https://www.msl.army.mil>)

area of operations (AO). An operational area defined by a commander for land and maritime forces that should be large enough to accomplish their missions and protect their forces. (Joint Publication [JP] 3-0)

Army Forces (ARFOR). The Army component and senior Army headquarters of all Army forces assigned or attached to a combatant command, subordinate joint force command, joint functional command, or multinational command. (Field Manual [FM] 3-94)

Army Service component command (ASCC). Command responsible for recommendations to the joint force commander on the allocation and employment of Army forces within a combatant command. (JP 3-31)

common operational picture (COP). A single identical display of relevant information shared by more than one command that facilitates collaborative planning and assists all echelons to achieve situational awareness. (JP 3-0)

defense support of civil authorities (DSCA). Support provided by U.S. Federal military forces, Department of Defense civilians, Department of Defense contract personnel, Department of Defense component assets, and National Guard forces (when the Secretary of Defense, in coordination with the governors of the affected states, elects and requests to use those forces in Title 32, U.S. Code, status) in response to requests for assistance from civil authorities for domestic emergencies, law enforcement support, and other domestic activities, or from qualifying entities for special events. Also known as civil support. (DOD Directive 3025.18)

digital liaison detachments. Army units providing liaison teams with digital information sharing capabilities in support of Army headquarters. (Army Techniques Publication [ATP] 3-94-1)

host nation (HN). A nation which receives the forces and/or supplies of allied nations and/or NATO organizations to be located on, to operate in, or to transit through its territory. (JP 3-57)

interoperability. (1) The ability to operate in synergy in the execution of assigned tasks (JP 3-0). (2) The condition achieved among communications-electronics systems or items of communications-electronics equipment when information or services can be exchanged directly and satisfactorily between them and/or their users. (JP 6-0).

joint fires. Fires delivered during the employment of forces from two or more components in coordinated action to produce desired effects in support of a common objective. (JP 3-0)

joint operations area (JOA). An area of land, sea, and airspace, defined by a geographic combatant commander or subordinate unified commander, in which a joint force commander (normally a joint task force commander) conducts military operations to accomplish a specific mission. (JP 3-0)

knowledge management (KM). The process of enabling knowledge flow to enhance shared understanding, learning, and decision-making (ADRP 6-0). Knowledge flow is the ease of movement of knowledge in organizations. Knowledge management uses a five-step process to create shared understanding. The steps of knowledge management include: Assess, Design, Develop, Pilot, and Implement. (ATP 6-01.1)

liaison. That contact or intercommunication maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action. (JP 3-08)

mission command. The exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations. (ADP 6-0)

mission command system. The arrangement of personnel, networks, information systems, processes and procedures, and facilities and equipment that enable commanders to conduct operations. (ADP 6-0)

operational environment (OE). A composite of the conditions, circumstances, and influences that affect the employment of capabilities and bear on the decisions of the commander. (JP 3-0)

planning. The art and science of understanding a situation, envisioning a desired end state, and laying out effective ways of bringing that future about. (Army Doctrine Publication [ADP] 5-0)

planning horizon. A point in time commanders use to focus the organization's planning efforts to shape future events. (ADRP 5-0)

protection. Preservation of the effectiveness and survivability of mission-related military and nonmilitary personnel, equipment, facilities, information, and infrastructure deployed or located within or outside the boundaries of a given operational area. (JP 3-0)

regionally aligned forces (RAF). Those forces that provide a combatant commander with up to joint task force capable headquarters with scalable, tailorable capabilities to enable the combatant commander to shape the environment. They are those Army units assigned to combatant commands, those Army units allocated to a combatant command, and those Army capabilities distributed and prepared by the Army for combatant command regional missions. (FM 3-22)

security force assistance (SFA). The set of DOD activities that contribute to unified action by the U.S. government to support the development of capability and capacity of foreign security forces and supporting institutions. (JP 3-22)

strategic level of warfare. The level of warfare at which a nation, often as a member of a group of nations, determines national or multinational (alliance or coalition) strategic security objectives and guidance, then develops and uses national resources to achieve those objectives. (JP 3-0)

sustainment. The provision of logistics and personnel services required to maintain and prolong operations until successful mission accomplishment. (JP 3-0)

Tactical Airspace Integration System (TAIS) Airspace Workstation (AWS). The TAIS AWS provides automated airspace control planning and enhanced airspace control execution. TAIS interfaces with Army and joint command and control systems and provides a direct link to the theater air-ground system through interface with the theater battle management core system. It also has an added civil and government interagency capability. (FM 3-52)

tactical control (TACON). The authority over forces that is limited to the detailed direction and control of movements or maneuvers within the operational area necessary to accomplish missions or tasks assigned. (JP 1)

targeting. The process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities. (JP 3-0)

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CADD develops, writes, and updates Army doctrine at the corps and division level. Find the doctrinal publications at either the Army Publishing Directorate (APD) at <http://www.apd.army.mil> or the Central Army Registry (formerly known as the Reimer Digital Library) at <http://www.adtdl.army.mil>.

Foreign Military Studies Office (FMSO)

FMSO is a research and analysis center on Fort Leavenworth under the TRADOC G-2. FMSO manages and conducts analytical programs focused on emerging and asymmetric threats, regional military and security developments, and other issues that define evolving operational environments around the world. Find FMSO products at <http://fmso.leavenworth.army.mil>.

Military Review (MR)

MR is a revered journal that provides a forum for original thought and debate on the art and science of land warfare and other issues of current interest to the U.S. Army and the Department of Defense. Find MR at <http://usacac.army.mil/cac2/militaryreview>.

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Capability Development Integration Directorate (CDID)

CDID conducts analysis, experimentation, and integration to identify future requirements and manage current capabilities that enable the Army, as part of the Joint Force, to exercise Mission Command and to operationalize the Human Dimension. Find CDID at <http://usacac.army.mil/organizations/mccoe/cdid>.

Joint Center for International Security Force Assistance (JCISFA)

JCISFA's mission is to capture and analyze security force assistance (SFA) lessons from contemporary operations to advise combatant commands and military departments on appropriate doctrine; practices; and proven tactics, techniques, and procedures (TTP) to prepare for and conduct SFA missions efficiently. JCISFA was created to institutionalize SFA across DOD and serve as the DOD SFA Center of Excellence. Find JCISFA at <https://jcisfa.jcs.mil/Public/Index.aspx>.

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