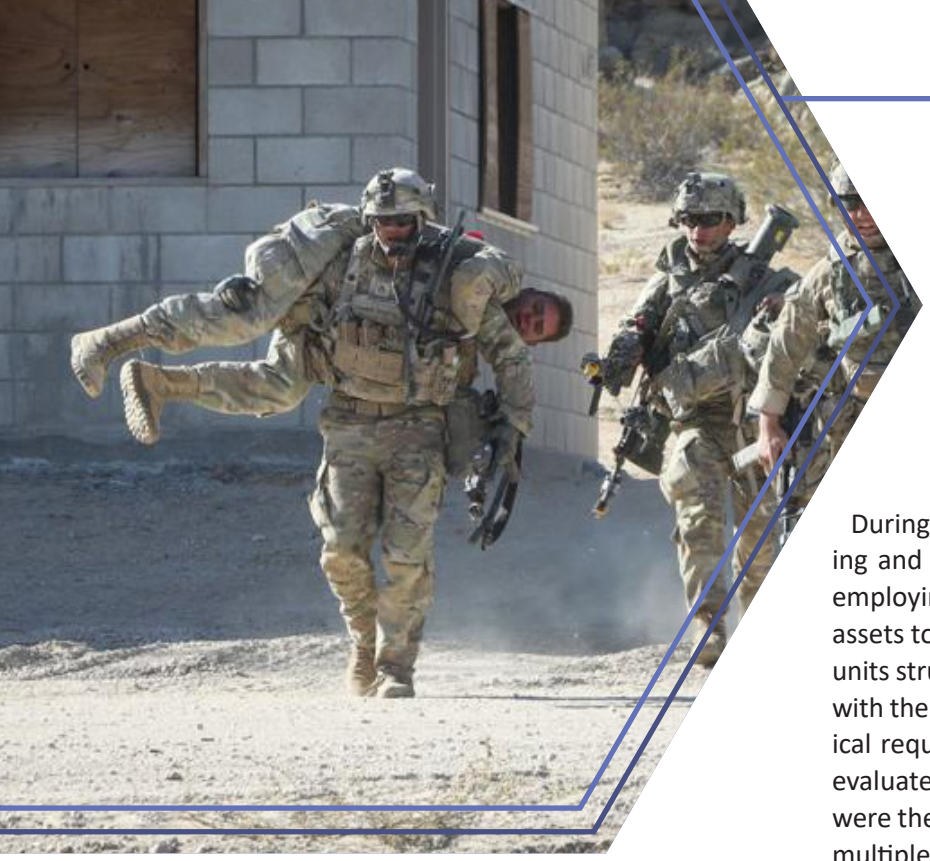
A G-2's Observations from the National Training Center and What to Do About Them

by Lieutenant Colonel Victor Somnuk

U.S. Army soldiers assigned to the 3rd Armored Brigade Combat Team, 1st Cavalry Division, inspect their vehicle during Motorpool Monday at the National Training Center, Fort Irwin, CA. (U.S. Army photo)

Introduction

The National Training Center (NTC), Fort Irwin, California, provides a realistic training environment for rotational training units to build and sustain readiness across the warfighting functions. For the intelligence warfighting function, NTC helps highlight and assess the ability of rotational training units to execute the intelligence process. The 1st Cavalry Division's 2nd and 3rd Armored Brigade Combat Teams and the 3rd Cavalry Regiment participated in rotational training at NTC from March through May 2022. The division staff supported the units throughout their rotations, with the division G-2's support including reception, staging, onward movement, and integration support teams; soldiers embedded with the units; and reachback to home station for intelligence processing, exploitation, and dissemination support.



3rd Calvary Regiment Soldiers carry a simulated casualty to the evacuation point during a decisive action rotation at the National Training Center (NTC) in Fort Irwin, CA. (U.S. Army photo by SPC Kyler Chatman, Operations Group, NTC)

Observations

Several strengths and weaknesses were identified from the training. The most apparent weaknesses across the force were a lack of proficiency in connecting, collecting, and communicating with military intelligence (MI) systems and the utility of unit primary, alternate, contingency, and emergency (PACE) plans to synchronize, collect, and disseminate intelligence. However, the units displayed strength in intelligence analysis, assessments, support to targeting, and overall crew proficiency once MI systems connected and collected the data needed to analyze and provide support to targeting.

In preparation for NTC, the 1st Cavalry Division and the 3rd Cavalry Regiment conducted Military Intelligence Training Strategy (MITS) Tier 2 (intelligence platforms) evaluations using the Intelligence Electronic Warfare Tactical Proficiency Trainer at the Fort Hood, Texas, Mission Training Center, which has an incredibly competent and supportive staff. The brigade combat team and regiment S-2s prepared their teams to address Tier 2 shortfalls and to provide the full suite of intelligence capabilities for Tier 1 (intelligence warfighting function) certification at NTC. Still, it became clear early in the unit deployment cycles that MI systems operability would be a challenge. Adherence to the conditions and standards laid out in the TC 2.19-400 series of publications is important to assess the readiness and proficiency of the intelligence warfighting function, especially for MI systems, prior to deployment. Leaders must be wary of relying on completed checklists serving as the measure of the intelligence warfighting function's effectiveness. Training artificialities exist in the MITS training circulars that can create a false sense of proficiency on MI systems.

During two of the rotations, the units had difficulty gaining and maintaining the upper tactical internet while also employing all available organic intelligence equipment and assets to collect and communicate across echelon. All three units struggled to communicate and synchronize intelligence with their down trace battalions and squadrons. This is a critical requirement that, unfortunately, MITS Tier 2 does not evaluate. Further exacerbating the communication struggle were the winds in the Mojave Desert reaching over 30 mph, multiple command post jumps, and the opposing force frequently wreaking havoc on the units' systems and process. These types of challenges are difficult to replicate during a MITS Tier 1 event at home station.

Individual Soldiers and crews displayed skilled proficiency in driving the intelligence process once mission command and MI systems were connected, operational, and optimally employed. The analytical skills of each unit enabled commanders and staff to understand and visualize the opposing force and terrain, supporting informed decision making. As a result, deep understanding of the enemy through refined intelligence preparation of the battlefield and effective processing, exploitation, and dissemination of geospatial and signals intelligence and human intelligence led to timely and relevant support to targeting.

Path Forward

The following summary covers actions the 1st Cavalry Division will implement to capitalize on lessons learned and mitigate the identified challenges. This will position the division to deploy ready crews and equipment that can fully leverage the Army intelligence enterprise at NTC or in theater.

Intelligence Systems Maintenance and Training. Soldiers require consistent and realistic training on the Distributed Common Ground System-Army intelligence systems and the dedicated time to maintain and operate them. Maintenance must improve to ensure that systems are ready to connect, collect, and communicate at NTC or in theater. As part of the Army intelligence enterprise's efforts to be multidomain operations capable, the 1st Cavalry Division is taking the following actions to improve the maintenance, training, and effectiveness of current systems.

Input Intelligence Systems and Components into the Global Combat Support System-Army (GCSS–A). MI systems are difficult to maintain for many reasons. Improved command awareness can spur a resolution to maintenance issues. The U.S. Army Forces Command order titled "Corps and MSC tasked ISO Intel WFF Systems Readiness," published 22 October 2019, tasked units to update GCSS–A with MI systems; thereby, ensuring property accountability, prioritization as pacing items, and readiness reporting. MI systems and sub-components reflected in GCSS–A will highlight longstanding issues tied to prime movers that frequently break down and low-density parts that render an MI system non-mission capable. Command emphasis is requisite to accomplishing this task. The importance of a dedicated automated logistical specialist (military occupational specialty [MOS] 92A) assigned to the MI company to assist in uploading and maintaining the data must be stressed.

> **We don't rise to the level of our expectations, we fall to the level of our training.**
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> **—Archilochus, Greek soldier and poet (680 and 645 BCE)**

Develop and Codify Tango Tuesdays. The intelligence warfighting function is dependent on the expertise of military intelligence systems maintainers (MOS 35T) to maintain intelligence systems and is often dependent on their proficiency to operate and troubleshoot non-maintenance issues. During the NTC rotations, operator proficiency gaps monopolized the time of 35Ts during every rotation. The 1st Cavalry Division instituted *Tango Tuesdays* to improve the maintenance and operation of MI systems. Similar to *Motor Pool Mondays*, an unofficial but well-understood U.S. Army vehicle maintenance program, the intelligence warfighters dedicate Tuesday mornings to complete preventative maintenance checks and services (PMCS) on MI systems and conduct operational tests. Lessons learned in the months since implementing Tango Tuesdays include the need to train Soldiers on how to appropriately perform PMCS on MI systems and the need to list the operational tasks that Soldiers should conduct. The 1st Cavalry Division is also working to codify Tango Tuesdays in an order to protect the time for MI companies within the brigade engineer battalions and to capture equipment maintenance and operating requirements. A good working relationship between the division G-2, G-6, and the brigade and brigade engineer battalion commanders and executive officers is important to garner the command influence necessary for implementation and execution of Tango Tuesdays.

Replicate Realistic Field Environment for Tier 2 MITS Events. MITS Tier 2 is the intelligence platforms certifying event and provides the best assessment of MI systems readiness. 1st Cavalry Division units, however, executed the certification events with fiber connections and shore power (grid power). These artificial connections reduced the normal equipment and architecture coordination requirements with the S-6 while ensuring the evaluation of intelligence analysis and assessments. Unfortunately, this also led to a false sense of proficiency. Units should conduct Tier 2 certification in a field environment with *all* organic MI systems connecting, collecting, and communicating within an established brigade architecture, including mission command information systems (MCIS), to properly validate the systems and PACE plans. Tier 2 certification should assess the compatibility and capabilities of systems across networks.

Require all MI Soldiers take the Digital Intelligence Systems Foundation Course (DISFC). Understanding MI systems and how the sensors, processors, outputs, and transport (SPOT) methodology interacts with the PACE plan, across echelons and networks, is key to building a viable intelligence architecture with functional redundancy. DISFC provides the basic information all MI Soldiers should know to develop better intelligence architectures with the systems available to them. The course empowers the creativity and initiative to drive the intelligence process when primary systems or networks are contested. The 1st Cavalry Division G-2 integrated DISFC into the division's training plan and is strongly encouraging all subordinate brigades to include it as part of their training progression from Tier 4 to Tier 2 MITS.

Connect, Collect, and Communicate. Soldiers at every echelon must understand and rehearse PACE plans for them to be effective. Processing, exploiting, and disseminating intelligence depends on well-established and rehearsed PACE plans. Likewise, the SPOT functions within the PACE plan must be understood and codified. A sobering trend during the NTC rotations was the hesitance of intelligence sections to switch from primary systems to alternate methods resulting in stagnant intelligence, idle Soldiers, and an unsynchronized intelligence picture. This hesitance may result from:

- Insufficient knowledge of the SPOT data flow.
- Limited familiarity with the PACE plan.
- No codified PACE plan criteria delineating movement to another method.

Typically, Soldiers do not understand how to manage the architecture or drive the intelligence process to get information flowing again. Below are three measures the 1st Cavalry

Division is taking to help intelligence sections connect their systems, collect information, and disseminate the information. Strong relationships with the S-6 and S-3 are vital to train and rehearse using MI systems and MCIS with consistency to validate PACE plans.

Develop a Thorough and Redundant Intelligence Architecture. The intelligence warfighting function has redundant capabilities to both connect and collect. Redundancy mitigates communication degradation challenges units will likely find at NTC and in theater. Including all organic MI systems in the intelligence architecture provides options when equipment falters or there is a need for additional bandwidth. Every battalion has a Global Broadcast Service and One System Remote Video Terminal that provide the S-2 with amazing capabilities to keep commanders and higher echelons informed. The brigades are equipped with the Trojan Special Purpose Integrated Remote Intelligence Terminal (SPIRIT), Modular Communications Node-Advanced Enclave (MCN–AE), Tactical Intelligence Ground Station, and Prophet systems, which all can connect and collect information. It is vital that units' assigned equipment deploys and integrates into the architecture to enable a multichannel PACE plan. Lower tactical internet radios and the Joint Battle Command-Platform are critical to communication, dissemination, and receipt of information.

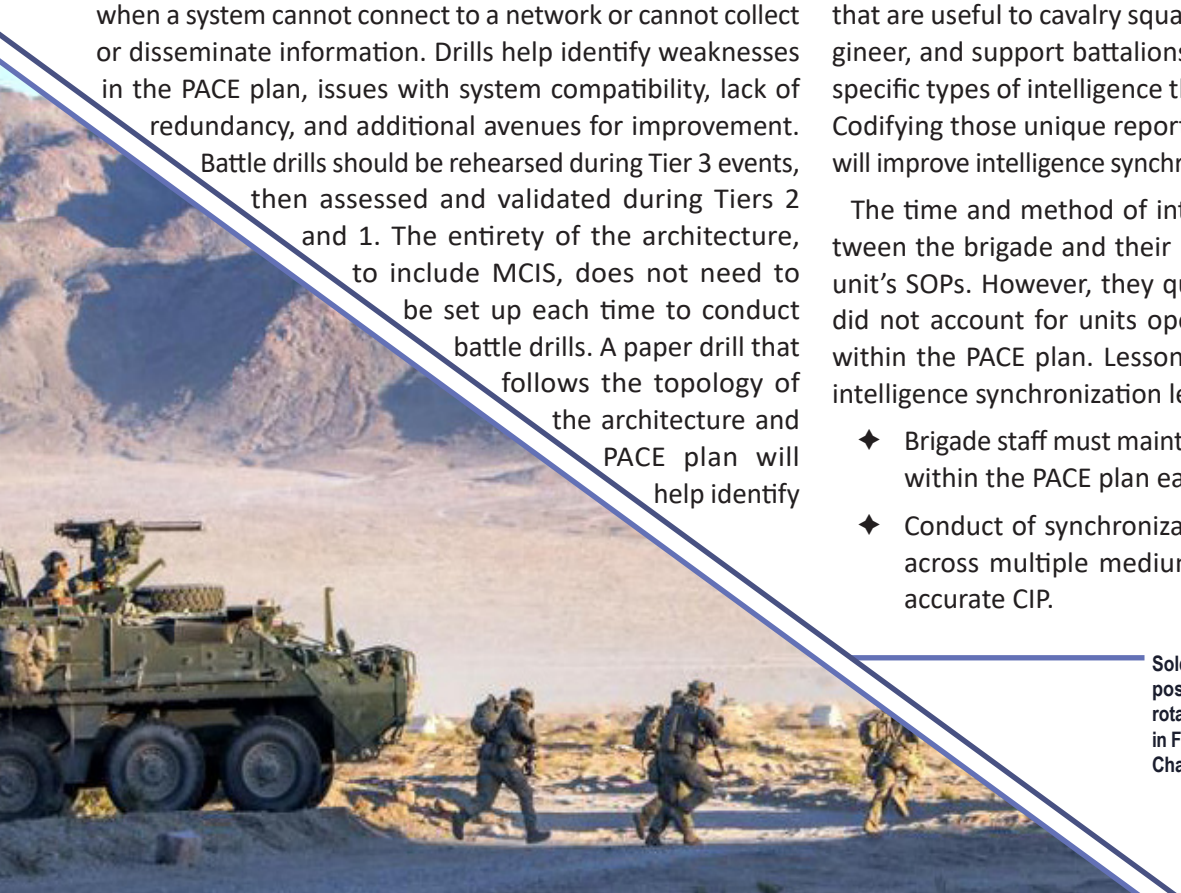
Develop Battle Drills to Rehearse Architecture and PACE Plan. Battle drills for intelligence systems operations and the interoperability of systems and networks within an architecture and PACE plan will improve communication and the speed of the intelligence process. Establishing drills requires incorporating criteria to shift along the PACE plan when a system cannot connect to a network or cannot collect or disseminate information. Drills help identify weaknesses in the PACE plan, issues with system compatibility, lack of redundancy, and additional avenues for improvement. Battle drills should be rehearsed during Tier 3 events, then assessed and validated during Tiers 2 and 1. The entirety of the architecture, to include MCIS, does not need to be set up each time to conduct battle drills. A paper drill that follows the topology of the architecture and PACE plan will help identify transition points across systems and networks that will likely create interoperability issues. Interoperability concerns should be explored during Tango Tuesdays (for example, shifting from Primary: MCN–AE for Top Secret connectivity to Alternate: Trojan SPIRIT). Criteria for PACE transitions can be time or event based (for example, transition to Trojan after 20 minutes of no upper tactical internet on the Army's tactical network, or during tactical operations center tear down).

Equip and Train on Lower Tactical Internet to Maintain the Common Intelligence Picture (CIP). The brigades' inability to dialogue with their battalions further exacerbated the challenge of maintaining the CIP during the NTC rotations. Producing an intelligence picture was difficult when MI systems and/or connectivity were inoperative, and information was not collected. Sometimes the rotational training units relied on lower tactical internet to synchronize and disseminate intelligence. Intelligence sections require a dedicated radio and the Joint Battle Command-Platform to maintain communications and the CIP. Every intelligence section must field these modified table of equipment items, and they must integrate them into the architecture and PACE plan. Tango Tuesdays must include MCIS along with radio operators designated for each system to increase proficiency.

Dedicate a Standard Operating Procedure (SOP) to Intelligence Synchronization. The units' struggles to maintain a CIP did not cease upon establishing communications. Many down trace battalions and squadrons did not know what their brigade required, and brigades did not know what information to share with each battalion. Much of this information is METT-TC[1] dependent; however, there are specific types of information that are useful to cavalry squadrons, maneuver, artillery, engineer, and support battalions. Similarly, those units collect specific types of intelligence that are useful to their brigade. Codifying those unique reporting requirements into an SOP will improve intelligence synchronization across the battlefield.

The time and method of intelligence synchronization between the brigade and their battalion S-2s was in all three unit's SOPs. However, they quickly learned that their SOPs did not account for units operating using different means within the PACE plan. Lessons learned from executing the intelligence synchronization led to two SOP adjustments:

- Brigade staff must maintain awareness of which system within the PACE plan each battalion is using.
- Conduct of synchronization meetings needs to occur across multiple mediums and formats to ensure an accurate CIP.



Soldiers from 3rd Cavalry Regiment move their position forward during a decisive action rotation at the National Training Center (NTC) in Fort Irwin, CA. (U.S. Army photo by SPC Kyler Chatman, Operations Group, NTC)

3rd Armored Brigade Combat Team, 1st Cavalry Division, ready their vehicles for inspection during Motorpool Monday at the National Training Center, Fort Irwin, CA. (U.S. Army photo)

The same adjustments held true for knowledge management and the dissemination of intelligence. The best practice was to disseminate across every available medium to increase synchronization.

SOPs are often tedious to build, and then units egregiously underutilize them. They rarely live past the regime that built them because units do not view SOPs as living documents to reference and validate at every training event or exercise. SOPs do not always account for issues experienced and lessons learned during exercises. They are often purpose built for the unit that drafted them and not shared with subordinate or higher units. Units should treat SOPs like playbooks. They should rehearse and validate them during Tango Tuesdays and battle drills. A deliberate reading of the SOP with supporting echelons will identify friction points and ensure the intelligence enterprise is at least familiar with synchronization and reporting requirements.

Conduct Pre-Combat Checks and Pre-Combat Inspections. Communications security, Global Broadcast Service Mission Requests, accounts, equipment, SECRET Internet Protocol Router Network tokens, authority to operate, etc., can set the intelligence warfighting function up for success or limit its ability to operate intelligence systems and provide the commander and staff the intelligence needed to support decision making and targeting. The final MITS certification event typically concludes months before a deployment. Tango Tuesdays can help identify potential shortfalls before a unit deploys. Units should build a deliberate precombat check/precombat inspection into the train up and conduct it 60 days prior to deployments. This allows sufficient time to process requests for access and accounts.

Conclusion

In hindsight, the challenges that 1st Cavalry Division's units faced at NTC are not unusual. They are frequently found in lessons learned and after action reviews. How the Army can improve training and readiness to avoid succumbing to the perennial shortfalls is less obvious. This is not a call to shift training focus away from intelligence analysis and assessments. It is, however, an acknowledgement of the importance of maintaining and operating MI systems and programs of record to truly improve readiness. DISFC is an excellent baseline to introduce intelligence Soldiers to systems and networks. Building additional depth with Gunner Entry Programs and Digital Intelligence Systems Master Gunners across the brigades is an additional high return investment. Tango Tuesdays is a method to provide consistent time for improving system maintenance and operator proficiency. Including the S-6 and MCIS in Tier 2 events, as proven by the 3rd Cavalry Regiment, will provide a better assessment of the intelligence warfighting function's proficiency and ability to connect, collect, and communicate with MI systems. A renewed focus on codifying intelligence synchronization, reporting requirements, and rehearsals in a living SOP will improve communication and the intelligence picture.

Endnote

1. METT-TC is a mnemonic used by the military to help Soldiers remember and prioritize what mission variables to analyze during an operation. METT-TC stands for mission, enemy, terrain and weather, troops and support available, time available, and civilian considerations.

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