

# IBCT Distributed Command and Control:

## *Where I Command Is Not Where I Control*

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As one of two of the U.S. Army's most forward-postured infantry brigade combat teams (IBCTs) in the Indo-Pacific area of operations (AOR), the 2nd IBCT (Warriors), 25th Infantry Division (ID), conducted a series of command and control (C2) experiments as part of four seminal training events between August 2022 and May 2023.

The first training event was 2nd IBCT's internal field training exercise (FTX), Operation Nakoa Fleek, which took place in August 2022 on the island of Oahu as a validation exercise before execution of Joint Pacific Multinational Readiness Center (JPMRC) Rotation 23-01. The second training event was JPMRC Rotation 23-01 itself and occurred on the islands of Oahu and Hawaii in late October-November of 2022. The third and fourth training events were Salaknib and Balikatan – two Philippines-based partnered training exercises that took place March-May 2023 as part of Operation Pathways, the U.S. Army Pacific's (USARPAC's) primary contribution to campaigning in the Indo-Pacific.

With an emphasis on distributed C2, the experiments conducted by 2/25ID as part of these training events taught or reinforced the following four concepts:

**Concept #1:** C2 survival requires masking in the optical, thermal, electronic, and acoustic realms.<sup>1</sup> Key Idea — Masking is “all-domain camouflage” and is everyone's responsibility.

**Concept #2:** Focus on employing the capability instead of deploying the capability. Key Idea — If you want to reduce your logistical tail and remain alive, you must change your default setting and determine who deploys based on what the mission requires instead of who is on the team.

**Concept #3:** Expand your concept of the “rear area” to include “in sanctuary” nodes and the home-station headquarters. Key Idea — Your “rear area” is likely still way too close to the fight.

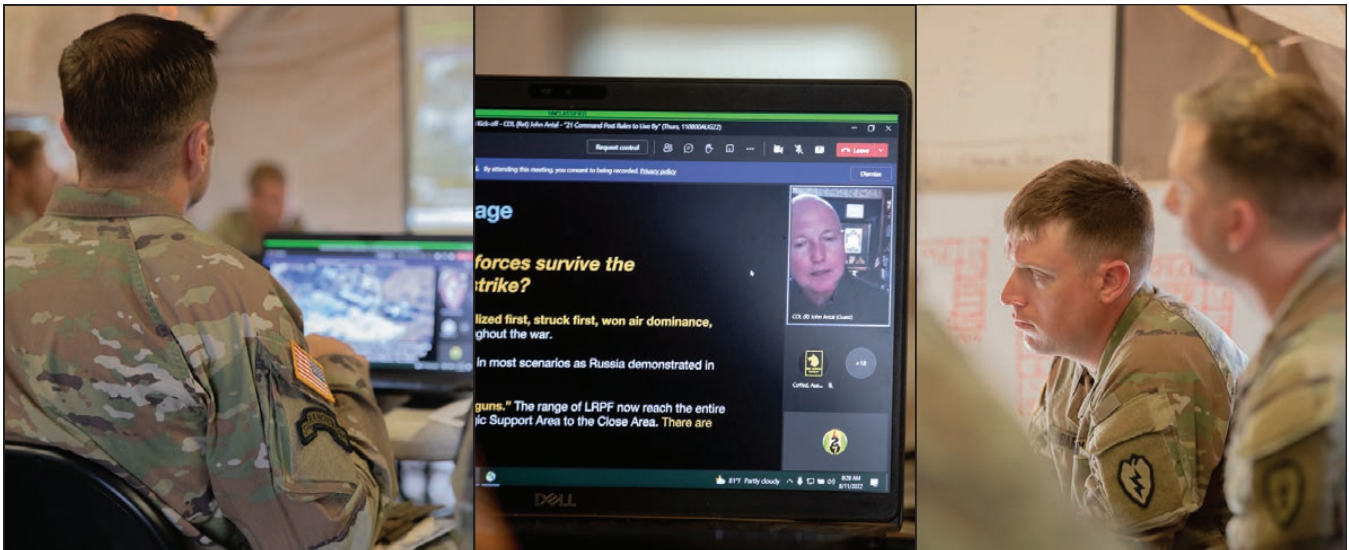
**Concept #4:** Constant alignment of “sight picture” is the key to maintaining distributed C2 unity of purpose. Key Idea — Holding the battle rhythm “hostage” and making disciplined but full use of the communications primary, alternate, contingency, emergency (PACE) plan is essential to maintaining the unity of purpose.

### **Scene-Setter and Background**

In the lead-up to Nakoa Fleek, it was a foregone conclusion that — naturally — everyone in 2/25ID would “deploy” into the field as part of the FTX. After all, this was our validation exercise prior to JPMRC, and it was essential that we be able to physically test all people and systems in person. However, while still in our self-designated intermediate staging base (ISB) just prior to commencing the exercise, two events took place that challenged this long-held conclusion:

- 1) A tactical operations center (TOC) and tactical action center (TAC) “open house,” which afforded every battalion/squadron key leader to see the physical form and function of each other's C2 nodes, and
- 2) A leader professional development (LPD) session with author COL (Retired) John Antal as our guest speaker via Microsoft Teams.

The purpose of the TOC open house was to enable leaders to “steal reps” from one another in an effort to accelerate C2 learning before the FTX began. The idea was that if units could see how each other's C2 nodes were configured and planned to be used, then they would be encouraged to steal best practices from one another and employ them in upcoming training during Nakoa Fleek. The open house was perfectly timed and achieved the intended effect, as more than one battalion/squadron TOC/TAC modified its C2 node from its original design.



In August 2022, COL (Retired) John Antal led a virtual leader professional development session on lessons from the Second Nagorno-Karabakh War for leaders in the 2nd Infantry Brigade Combat Team, 25th Infantry Division. (Photos courtesy of 2/25ID)

Next, a mere hours after this open house, COL Antal led a virtual LPD for all company, troop, and battery command teams and above on “Lessons Learned from the Second Nagorno-Karabakh War,” along with an introduction to his “21 Command Post Rules to Live By” and “Top Warfighting Disrupters.”<sup>2</sup> To say COL Antal’s LPD opened up our eyes and left an impression is a gross understatement, as it fundamentally changed a key training objective of Nakoa Fleek and — in fact — led to a series of C2 experiments in the months that followed. Now, instead of simply validating 2/25ID units for JPMRC and “fighting our TOCs” as we had always done, the goal was to apply our newfound knowledge from COL Antal’s presentation, and this brings us to our first concept.

***Concept #1: C2 survival requires masking in the optical, thermal, electronic, and acoustic realms.***

As COL Antal explained, the Second Nagorno-Karabakh War reinforced the importance of masking sight, heat signature, electronic signals, and sound. It was no longer good enough to simply throw a camouflage tarp over a TOC or TAC in the hope of being less detectable by enemy scouts or aerial platforms. Instead, on today’s battlefield every Soldier has a role to play in the application of “all-domain camouflage” (our phrase, not COL Antal’s) — a lesson that continues to be reinforced in the ongoing Russia-Ukraine conflict. In an example of failed electronic masking by the Russians, a recent *Washington Examiner* article explained how, “Ukrainian forces intercepted a [Russian] general’s call, locked in on his location, and killed him and his staff.”<sup>3</sup>

As the title of this article implies, distributed C2 is perhaps the most essential way to mask the existence and intentions of a C2 node, particularly for battalion/squadron and higher echelons in the jungle and littoral regions of the Indo-Pacific. During Nakoa Fleek, 2/25ID deployed to the field and established the doctrinal “main” command post (CP), or TOC, with an option to detach a smaller redundant C2 node in the form of a TAC.<sup>4</sup> Like most BCTs, under this configuration the 2nd IBCT executive officer (XO) and staff conducted “control” of warfighting functions and planning processes from the TOC, while the brigade commander provided “command” from the TAC whenever necessary. To maintain redundancy, assume control of combat operations, and displace if required, the TOC and TAC remained operational with matching digital and analog common operating pictures (COPs), regardless of the commander’s location on the battlefield.

Energized by COL Antal’s presentation and eager to both maximize masking and disaggregate our TOC, in our first C2 experiment of Nakoa Fleek we broke the main CP into the following five nodes (a total of 44 vehicles, 132 personnel, not counting security elements):

1. Administrative and logistics cell (ALOC) — S1, S4, S6, medical operations — five vehicles, 20 personnel
2. Current operations (CUOPS) — Kill-chain essential personnel such as S2, fires, BCT aviation element, and legal — five vehicles, 30 personnel
3. Plans — Planners from all warfighting functions — three vehicles, 20 personnel
4. Brigade intelligence support element (BISE) — 25 vehicles, 45 personnel
5. TAC element — six vehicles, 17 personnel

Nodes 1-4 were each housed under a medium Deployable Rapid Assembly Shelter (DRASH) tent and placed about 300 feet from one another, the max distance supported by Ethernet cable, to minimize the effectiveness of enemy artillery. In addition, the 2nd IBCT S6 officer in charge (OIC) invested time and effort to run Ethernet cables instead of primarily implementing line of sight (LOS) radios to reduce unnecessary electromagnetic emissions that the opposing force (OPFOR) could quickly and lethally target. In conjunction with physically disaggregating the nodes, 2nd IBCT also implemented an emission control (EMCON) standard operating procedure (SOP) that further reduced electromagnetic emissions dynamically based on mission requirements and assessed threat levels during each phase of the operation. The EMCON SOP emphasized many foundational methods of emission control such as operating radio equipment at reduced power levels, using directional instead of omnidirectional antennas when possible, turning off radio equipment when not in use, and limiting radio usage to mission-essential communications.<sup>5</sup> The EMCON SOP was also accompanied by a commander's policy that prohibited personal electronic devices of all types anywhere on the battlefield. In the case of the TAC element, we removed the DRASH and replaced it with a commercial off-the-shelf (COTS) pop-up picnic tent at the center of five corralled High Mobility Multipurpose Wheeled Vehicles (HMMWVs), all under camouflage netting. The TAC consisted of 17 personnel, including the 2nd IBCT commander, S2 OIC, S3 OIC, BCT fire support officer, and Advanced Field Artillery Tactical Data System (AFATDS) operator. For the remainder of Nakoa Fleek, we did our best to fight distributed from our five nodes.

***Concept #2: Focus on employing the capability instead of deploying the capability.***

During the two months following Nakoa Fleek before our JPMRC rotation, we focused heavily on reducing our deployed footprint further. Five C2 nodes — as dispersed as they might be — still felt like too many vehicles to maintain (44) and mouths to feed (132). Upon reflection, we realized the determining factor we had used to decide who deployed to Nakoa Fleek was simple — if you were on the 2nd IBCT staff, you would deploy unless you were non-deployable. This mindset is common among Army staffs at all echelons, yet it is devoid of any analytic rigor as it falsely implies that everyone on the staff is “mission essential” and therefore must deploy. And if they must deploy, then they must be fed, housed, and protected. Perhaps this default way of thinking needed an upgrade on the modern large-scale combat operations (LSCO) battlefield of the future, where masking, dispersion, and agility are king.

In retrospect, why were we trying to C2 this way? After all, for more than 20 years the United States fought wars in Iraq and Afghanistan from TOCs and joint operations centers (JOCs) that never left the wire or the confines of the forward operating base (FOB) they were on. As the global war on terrorism (GWOT) taught us, TACs can thrive in the close fight “outside the wire,” but the thought of a TOC/JOC fighting this way is laughable. Why then, were we taking our TOCs “into the box” at combat training centers (CTCs) and hoping for a different outcome? Of course, our TOC would be discovered and killed; it is the largest entity on the battlefield! This epiphany led us to a critical decision prior to JPMRC: Employment of the capability — not deployment of the capability — would lead us to who (people) and what (assets) should deploy. By backward planning from the fighting echelon needing our support, we would determine what C2 nodes would be physically present at JPMRC.

***Concept #3: Expand your concept of the “rear area” to include “in sanctuary” nodes and the home-station headquarters.***

Field Manual (FM) 3-94, *Armies, Corps, and Division Operations*, outlines the operational framework for commanders to organize their AOR, using deep, close, rear, and support areas.<sup>6</sup> Absent from FM 3-94, however, is the notion of a commander organizing for operations utilizing their home-station headquarters or other non-battle zone protected areas “in sanctuary.” Despite modern technology making it entirely possible, Army doctrine does not account for C2 nodes to be employed in this manner. This, then, would be our second major experiment: After applying Concept #2, we would expand our “rear area” and place three of our five major C2 nodes “in sanctuary” at the 2nd IBCT headquarters.

After gaining approval from the 25ID Commanding General, 2/25ID deployed to and fought JPMRC 23-01 with only a CUOPS element and TAC “forward” — roughly 70 personnel “in the box,” one DRASH tent, and approximately 15 vehicles. All other nodes' personnel — the ALOC, Plans, and BISE — remained in sanctuary under one roof, thereby cutting our logistics tail in half without degradation of our warfighting capabilities. Outside the long-range enemy fires range and supported by a fiber optic communications backbone, the 2/25ID XO enforced a disciplined





**Soldiers from the S6 section of 1st Battalion, 21st Infantry Regiment, 2nd Infantry Brigade Combat Team, 25th Infantry Division, give a class on Integrated Tactical Network equipment and capabilities during Nakoa Fleek in August 2022. (Photo courtesy of 1-21 IN)**

battle rhythm for all forces and led our sanctuary elements through the military decision-making process (MDMP), targeting, personnel tracking, logistics planning, spectrum support, cyber defense, and intelligence analysis. Since the sanctuary elements remained out of harm's way and were capable of disciplined shift work, we were able to leverage their analytic bandwidth to help manage a fight spanning two islands (Oahu and Hawaii), nearly 3,700 Soldiers, multi-nodal transport (ground, air, and sea), three Indo-Pacific partner nations, and eight battalion-size elements.

Meanwhile, the forward CUOPS element enjoyed the freedom and agility gained by the removal of 42 Soldiers (who were now in sanctuary), improved optical and audible masking, and reduced logistical burdens of transportation and Class I/III resupply. CUOPS personnel consisted of kill-chain essential personnel who had to be forward due to technical limitations such as the aviation element's shelter and counterfire that still relied on LOS communications. Also, on the CUOPS floor was the field artillery battalion commander, who serves as the fire support coordinator in LSCO. Always geographically separated from the CUOPS element in the spirit of dispersion, the TAC maintained the same general configuration it had during Nakoa Fleek but removed the point of presence (POP) key leader vehicle (KLV), which had been mounted on an audibly loud and physically large Mine-Resistant Ambush Protected (MRAP) All-Terrain Vehicle. Replacing the KLV's upper tactical internet with a Transportable Tactical Command Communications (T2C2) Ground Antenna Transmit and Receive (GATR) ball improved the TAC's position significantly.

***Concept #4: Constant alignment of "sight picture" is the key to maintaining distributed C2 unity of purpose.***

The final C2 experiment pertained to the content or quality of the information being shared and involved the latter part of JPMRC 23-01 and both Salaknib and Balikatan in the Philippines. As alluded to above, we found that by holding our own battle rhythm "hostage," combined with a reliable and robust PACE plan, we could align our operational "sight picture" dozens of times a day to ensure mission command principles remained nested within a clear unity of purpose. We did this, primarily, through reliance on a robust Secure Internet Protocol Router (SIPR) network supported by low earth orbit (LEO) assets, which enabled 24/7 Secure Voice Teleconferencing (SVTC) and a SIPR strike bridge over Secure Voice Over Internet Protocol (SVOIP). Not only did SVTC and SVOIP facilitate late-night MDMP briefings and commander's update briefs (CUBs), but they also facilitated instant two-minute/seven-minute drills as significant actions occurred. Reliable voice communications also allowed the commander to maneuver closer to the enemy and front lines in the TAC without making frequent trips to CUOPS.

As our experiment expanded into the Philippines in the spring, we found ourselves relying even more heavily on technology to stay connected with our rear and sanctuary elements. If leadership is the linchpin of distributed C2, communications is undoubtedly the foundation. Capability Set 21 (CS21) and the Integrated Tactical Network (ITN) enabled 2nd IBCT and battalion CPs across the Indo-Pacific via smaller beyond line-of-sight (BLOS) internet capabilities, such as the T2C2 and Scalable Class of Unified Terminals (SCOUT). These satellite terminals require less power, are easier to hide and use, and provided 2nd IBCT with high bandwidth feeds, like live unmanned aircraft system (UAS) footage. When SVTC or Microsoft Teams was not available, we held CUBs over the reliable mobile user objective system (MUOS) tactical satellite radio, which is fielded down to platoon level. Additionally, the Windows Tactical Assault Kit (WINTAK) provided real-time position location information and an intuitive chat function for all. In all, the systems described above resulted in a “self-healing” PACE, affording 2nd IBCT the luxury of never being without communications during any critical part of JPMRC or Operation Pathways—including while conducting C2 aboard a Navy vessel. Of note, while using these techniques, the 2nd IBCT TAC was never discovered by the OPFOR during JPMRC.

### Final Thoughts and Conclusion

Since they are so fitting, and since we deliberately attempted to apply them in multiple large-scale FTXs, it is useful to return to COL Antal’s “21 Command Post Rules to Live By” once more. We found this paraphrased/combined list of six to be most applicable in 2nd IBCT:

1. Every command post can be located, targeted, and hit. What is your battle drill to react?
2. Reduce/mask signatures to survive (optical/thermal/electronic/acoustic).
3. Train every command post to take over the fight and C2 on the move.
4. Have a plan to occupy a hardened structure and C2 from existing towns and cities.
5. Know what your command post looks like from above. Adjust accordingly.
6. Employ decoys across the signature spectrum to give the enemy false positives.<sup>7</sup>

For distributed C2 concepts to truly work, leaders must embrace the Army’s mission command philosophy, including competence, mutual trust, shared understanding, commander’s intent, disciplined initiative, mission orders, and risk acceptance.<sup>8</sup> It is understandable for there to be reluctance to fully embrace the idea of not deploying with one’s full complement of capabilities, but remember—importance is not measured by proximity. Some of our nation’s most precious and advanced warfighting technologies have never left the confines of our own protected borders, because there is no need for them to do so. The same might be said of how we choose to fight while distributed on a LSCO battlefield of the future. Those hesitant to change are reminded of the words of former Army Chief of Staff General Eric Shinseki: “If you don’t like change, you’re going to like irrelevance a lot less.”<sup>9</sup>

### Notes

<sup>1</sup> COL (Retired) John Antal, “21 Command Post Rules to Live By,” 3 August 2022, accessed from <https://community.apan.org/wg/tradoc-g2/mad-scientist/m/articles-of-interest/419062>.

<sup>2</sup> COL (Retired) John Antal, “Top Attack: Lessons Learned from the Second Nagorno-Karabakh War,” 1 April 2021, accessed from <https://madsciblog.tradoc.army.mil/317-top-attack-lessons-learned-from-the-second-nagorno-karabakh-war/>; “21 Command Post Rules to Live By;” and “Top Warfighting Disrupters,” 27 May 2022, accessed from <https://www.canada.ca/en/army/services/line-sight/articles/2022/05/col-ret-john-antals-top-warfighting-disrupters.html>.

<sup>3</sup> Greg Wilson, “Russian Generals Paying Price for Using Unsecured Phones, Radios in Ukraine War,” *Washington Examiner* (17 March 2022), accessed from <https://www.washingtonexaminer.com/news/russian-generals-paying-price-for-using-unsecured-phones-radios-in-ukraine-war?msclkid=5a834382a62911ec8f67f983c9bb3c1e>.

<sup>4</sup> Field Manual (FM) 3-94, *Armies, Corps, and Division Operations*, July 2021, 5-6 thru 5-7, accessed from [https://armypubs.army.mil/epubs/DR\\_pubs/DR\\_a/ARN34770-FM\\_3-94-000-WEB-1.pdf](https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN34770-FM_3-94-000-WEB-1.pdf).

<sup>5</sup> Training Circular 6-0, *Training the Command and Control Warfighting Function*, March 2021, 1-22, accessed from [https://armypubs.army.mil/epubs/DR\\_pubs/DR\\_a/ARN31776-TC\\_6-0-000-WEB-1.pdf](https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN31776-TC_6-0-000-WEB-1.pdf).

<sup>6</sup> FM 3-94, 2-19.

<sup>7</sup> Antal, “21 Command Post Rules to Live By.”

<sup>8</sup> Army Doctrine Publication 6-0, *Mission Command: Command and Control of Army Forces*, July 2019, x, accessed from [https://armypubs.army.mil/epubs/DR\\_pubs/DR\\_a/ARN34403-ADP\\_6-0-000-WEB-3.pdf](https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN34403-ADP_6-0-000-WEB-3.pdf).



<sup>9</sup> Stephanie Eidelmann, "If You Don't Like Change, You're Going to Like Irrelevance a Lot Less," insideARM (1 October 2019), accessed from <https://insidearm.com/news/00045509-if-you-dont-change-youre-going-irrelevanc/>.

**COL Graham R. White** currently commands the 2nd Infantry Brigade Combat Team, 25th Infantry Division (ID) at Schofield Barracks, HI. He commissioned as an Infantry officer in 2000 after graduating the U.S. Military Academy (USMA) at West Point, NY. As a junior officer, COL White served in multiple company, battalion, and brigade-level positions in 3rd Battalion, 504th Parachute Infantry Regiment (PIR), 1st Brigade Combat Team (BCT), 82nd Airborne Division, Fort Bragg, NC, and 3rd Battalion, 75th Ranger Regiment, Fort Benning, GA. He then served as a rifle company commander in 1st Battalion, 9th Infantry Regiment, 2nd BCT, 2nd Infantry Division, Fort Carson, CO, followed by Ranger company commands in 2nd Battalion, 75th Ranger Regiment, Fort Lewis, WA, and the Regimental Special Troops Battalion, 75th Ranger Regiment, Fort Benning. As a field grade officer, COL White served as the executive officer (XO)/S3 for 2nd Battalion, 35th Infantry Regiment and BCT S3 in 3rd BCT, 25ID, followed by service at Joint Task Force Bravo, Honduras as the J5, and U.S. Army Pacific, Fort Shafter, HI, as a strategic planner. Most recently, COL White commanded 2nd Battalion, 505th PIR, 3rd BCT, 82nd Airborne Division, served as the assistant chief of staff, G3, 82nd Airborne Division, and commanded 3rd Battalion, 75th Ranger Regiment. In addition to the Bachelor of Science degree from USMA, COL White also earned a Master of International Public Policy from Johns Hopkins University and a Master of Strategic Studies from the Army War College.

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A 25th Infantry Division Soldier conducts field reconnaissance during Joint Pacific Multinational Readiness Center 23-01 on 31 October 2022 on Hawaii's Pohakuloa Training Grounds. (Photo by SGT Daniel Proper)