Company Commanders Share CALFEX Lessons Learned

2ND INFANTRY BRIGADE COMBAT TEAM, 25TH INFANTRY DIVISION

In September 2016, the companies and troops of the 2nd Infantry Brigade Combat Team (IBCT), 25th Infantry Division conducted combined arms live-fire exercises (CALFEXs), a culminating training event that set the foundation for battalion live-fire exercises (LFXs) that the brigade would execute during its upcoming rotation to the Joint Readiness Training Center (JRTC) at Fort Polk, LA. The CALFEX was also a primer for Operation Lightning Forge, a brigade-level culminating training event that created a JRTC-like environment on Oahu. The CALFEX scenarios required companies to close on an objective under direct and indirect suppression, execute a breach, destroy a bunker, clear a building cluster, and defend against a counterattack. To do so, each company was weighted with assets both internal and external to the brigade, including engineers, AH-64 gunships, a mounted heavy-weapons section (for the rifle companies), and a direct support 105mm howitzer battery. Companies had to negotiate both highly restricted terrain and large open danger areas en route to the objective; they also had the opportunity to receive live intelligence updates from unmanned aerial vehicle (UAV) and sniper assets. The scenario stressed each company's systems across all warfighting functions.

Following the exercise, several of the commanders captured their key lessons learned and shared their experiences with the other commanders in the brigade. The following sections are excerpts from their notes.

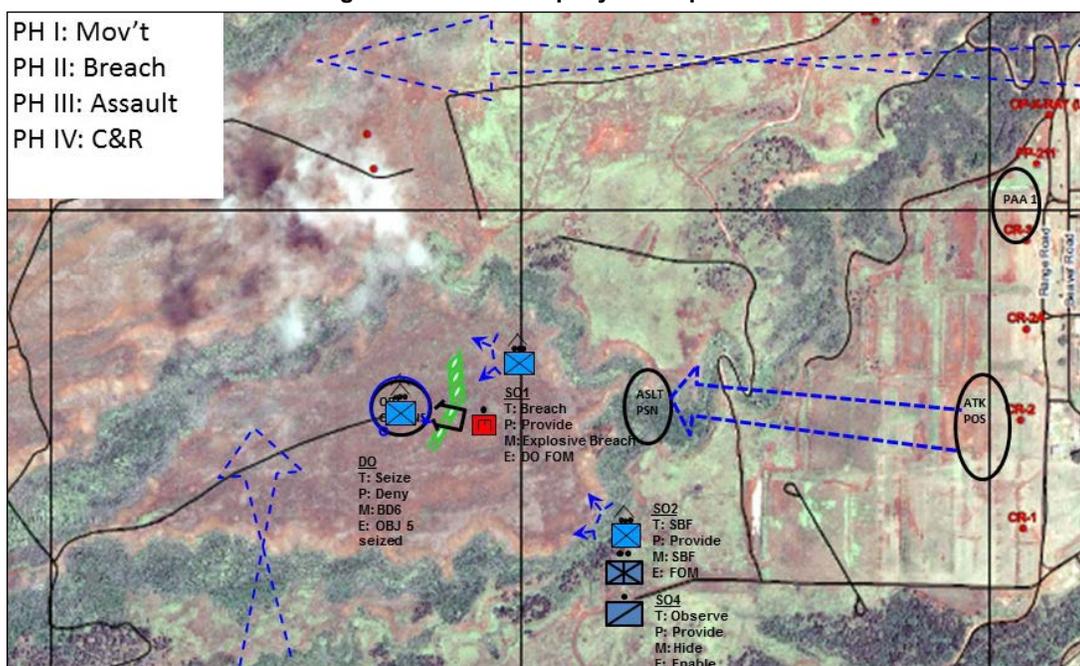### CPT Zack McAdams, commander of A Company, 1st Battalion, 21st Infantry Regiment (GATOR 6)

The experience was extremely humbling for everyone involved. Starting with myself, I did not perform to the measure that I had set for myself. The CALFEX gave everyone an opportunity to grow exponentially, down to the newest rifleman. Having "thick skin" wasn't always easy while receiving feedback, but having the external set of eyes from the brigade and battalion levels really allowed us (the company) to see ourselves and where we must improve to take the next step forward. This started with balancing the art and science of mission command. Releasing enough control to my subordinates to allow them to manage their platoons, triggers, and indirect targets in accordance with the plan allowed me to manage the fight at a higher level and ensure conditions were set for upcoming key events. Commanders no longer need to be in the direct fight, but rather they should manage from a vantage point that allows them to see the battlefield and prepare for the enemy's next action.

Develop junior NCOs, especially team leaders — I would argue that we grasped the overarching concepts at the company level. What I believe takes the "good" companies to "great" is having well-versed team leaders who understand their role in the larger fight. That starts with simple ideas like fire commands, assigning sectors of fire (beyond "10 and 2"), laser manipulation, and gathering LACE (liquid, ammunition, casualties, equipment) reports. Our team leaders struggled throughout our time executing the training event. We are developing a "Team Leader University" based on what we saw at the CALFEX that will be executed prior to Lightning Forge. We will continue to share across the board as we move forward. We can't blame junior leaders and Soldiers for what they haven't been taught, and we must train two levels down to ensure that our NCOs are given all the necessary tools to succeed.

Key leaders and weapon

Figure 1 — Rifle Company Concept for CALFEX

PH I: Mov't
PH II: Breach
PH III: Assault
PH IV: C&R

SO1
T: Breach
P: Provide
M: Explosive Breach
E: DO FOM

DO
T: Seize
P: Deny
M: BD6
E: OBJ 5 seized

SO2
T: SBF
P: Provide
M: SBF
E: FOM

SO4
T: Observe
P: Provide
M: Hide
E: Enable

systems need to be placed at the right areas — Deciding where key leaders needed to be and clearly defining their roles and responsibilities made a world of difference. Any plan to put key leaders at the points of friction briefs well, but executing that plan on the ground can be significantly more difficult. Young platoon leaders (PLs) understanding their roles and responsibilities in the company fight brought the execution of the training to a new level, empowering their NCOs to fight and allowing the PLs to "cross-talk" during the operation. This cross-talk made a clear difference in the speed and tempo of achieving our decisive point and graduated the PLs to a new level of understanding. The same can be said for key weapon systems. Emplacing multiple M249s with the right team/squad will allow you to gain fire superiority at a point in the fight necessary to set conditions for that weapons squad to move into position. The right leaders with the right applied combat power will allow commanders to execute violent and aggressive maneuver onto any objective against any enemy.

The fundamentals continue to be a struggle — Failure in basic requirements like "silence, violence, silence," positive identification, laser manipulation, radio procedures, and individual Soldier discipline limit our ability to take Soldiers to graduate-level training. These skills are all extremely perishable, but without the proper maintenance we lose them the same as physical stamina without doing physical training (PT). This ties into the aforementioned point regarding team leaders. When team leaders do their job of enforcing the fundamentals with their teams, this allows squad leaders to manage, PLs to cross-talk, and commanders to shape the fight.

Timing, tempo, and setting conditions are what drive an operation — Before committing any Soldier into the fight, we had to learn tactical patience and not rush to failure during our initial iterations. Taking the tactical pause and allowing conditions to be set with either indirect or direct fires (or a combination of both) took some time. Timing the triggers to not wait on those assets also took some training between the fire support team (FIST) and the element it supported. Leaders at all levels want to move forward and seize the objective, but we can't seize the initiative until we have allowed our assets to set the conditions. Fires planning allowed the tempo to feel smooth, allowing myself and the first sergeant (1SG) the ability to think two steps ahead — but not without some hard lessons learned regarding the timing of those indirect targets. The Raven UAV also played a large part of this by allowing our formation to gain fidelity on the enemy prior to departure and ensuring that the effects were being met before allowing Soldiers to move into visual contact with the enemy.

We are now better than we were before the CALFEX, which is all I can truly ask for. Each Soldier, including myself, has grown and become better for it. I look forward to applying these lessons learned in both Lightning Forge and JRTC as we continue our training path. I couldn't be prouder of the effort that the Gators put forth and the hard lessons that were learned across the board.
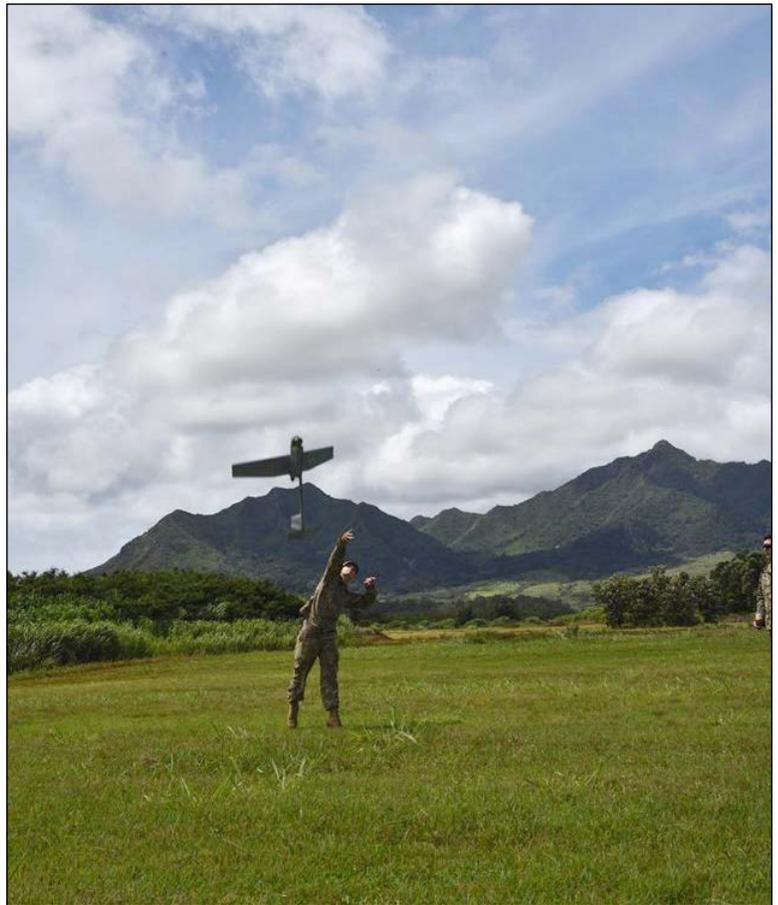
The fire support NCO for C Company, 1-21 IN launches a Raven to provide aerial reconnaissance of the objective and adjust indirect fires.

CPT Jon Voss, commander of B Company, 1-21 IN (BULL 6)

The CALFEX challenged Bull Company at every level and gave us a demanding, realistic look at our strengths and weaknesses. Like all live-fire environments, we initially felt constrained by the scenario, but I found it to be an incredibly valuable training event, as proven by the progress we saw across our iterations and the lessons that bought that progress. Below are a few of the lessons that were most significant to me as I commanded the Bulls through the attack:

De-link suppression fires from obscuration fires — We ran into friction when creating target groups that included obscuration and suppression effects in the same fire mission. This was problematic because the guns that fired our suppression were rounds-complete before the guns that fired our smoke. Therefore, the gun line wouldn't lay cold guns on a new target until the whole target group was mission complete. Simple fix: fire two separate fire missions.

Fires synchronization — At every transition point, I struggled to forecast how responsive the fires would be. So after some frustration, we adjusted the fires plan to create a continuous, sustained period of suppression that began on order and ran until our main and local support by fires (SBFs) were able to suppress the objective. When conditions were set, I gave the "fire" call to the fire support officer (FSO), and after that he just gave me periodic updates on how many

minutes of suppression we had remaining for each caliber so I could keep our maneuver moving at the right tempo. This simplification came at the expense of a detailed fires plan with tightly synchronized time-on-targets (TOTs), but it proved significantly more successful.

"Key leader at the friction point" isn't good enough — Our distribution of leaders at friction points was correct, but we didn't have a plan for how they would hand off squads, fire teams, or assets between the friction points to maintain momentum. We eventually worked it out but not without unnecessary pain. At the breach, where it was most tightly controlled, we ended up with a "flow master," who released each fire team once he saw the previous fire team was halfway to the breach.

Cross-talk between PLs — I slowly learned to push decision points down to the PL at the trigger for each transition. I started out acting as an unnecessary intermediary in order to ensure all conditions were set prior to making a trigger. That slowed the tempo and also forced me to become absorbed in too many details. Conversely, the PLs were more than capable of coordinating things with the other platoons. By the last iteration, we got to where I only had to give four radio calls and one face-to-face sync at the limit of advance (LOA).

Lethality and fire commands — We made a lot of money on simple accuracy of our fire, but we weren't able to take full advantage of it without our team leaders giving fire commands and squad leaders ensuring distribution of fire across the sector. Lesson learned: fire commands are a lost art, and we will retrain that task.

The execution checklist (EXCHECK) isn't everything — The EXCHECK is really useful for tracking our progress (especially for the executive officer [XO]), but it was distracting for the PLs and radio-telephone operators (RTOs) (and maybe me, just a little…) to remember and reference the name for each action, particularly at night. We used the EXCHECK for each iteration, but we used progressively more plain-English pro-words. For example, when it was time for our first shift fire, we called and echoed "shift fire 1" over the radio, instead of "Eve." And in the end, this ironically ended up meeting the goal of radio brevity and simplicity much more effectively.

As a company commander, panting is bad — I moved around too much during the first several iterations, including several aggressive bounds. These movements dragged me down to platoon level and prevented me from thinking deep. The metric I used for the live iterations was that if I caught myself breathing too heavily to talk calmly and clearly on the radio that meant I was doing too much. The real answer is probably somewhere in between, but I needed a tighter control over my own desire to be in the fight.

Those were the big things we learned. These lessons are not revolutionary, but they would have saved us pain if we had enforced them before the CALFEX. Most certainly, we are a better organization than we were before the CALFEX.

CPT Griff Getty, commander of C Company, 1-21 IN (TIGER 6)

Following the example of my peers, I've offered some

> *Our distribution of leaders at friction points was correct, but we didn't have a plan for how they would hand off squads, fire teams, or assets between the friction points to maintain momentum. We eventually worked it out but not without unnecessary pain.*

CALFEX reflections below. As a general note, I gained invaluable experience not only on bringing assets to bear to destroy the enemy but also on training management principles and leader development.

I anticipated the stress of the lane and the great training on movement, marksmanship, and battle drills we would conduct, especially having received the benefit of going last. What I did not anticipate, however, was how much I would learn about my own inadequacy to direct every action required for success at the company level.

The highlight of my personal lessons learned was that teamwork and lateral cross-talk makes mission command efficient. In theory, I could have been an effective commander by directing all actions as fast as I could talk on the radio (we all know we shouldn't try that), but to be effective and efficient and maintain a desired tempo, I had to rely on my PLs, 1SG, and XO. My confidence to fight my company grew as I started focusing on describing the endstate more than describing the action. I now have an experiential frame of reference to confirm that I can do more than one thing at a time when I focus on describing the endstate and trusting my leaders.

Additionally, during this experience, I noted how the brigade was able to address so many multi-echelon training goals during the event from training fire teams to battalions. Specifically, the development of our company and battalion FSOs and company and battalion medics was a huge outcome of the event. I learned as I watched our brigade commander mentoring our battalion FSO while he and my battalion commander coached me. Simultaneously, the field artillery (FA) battalion commander and brigade FSO coached the battalion FSO to be a better coach to the company FSO. All the while, I consistently beat up my company FSO and watched him get 100 percent better at his job. That was one of the most rewarding parts of the experience for me.

Below, I've listed three main after action review (AAR) points from the CALFEX that I think are worth sharing.

Troop leading procedures (TLPs) — It's critical that a company develops/continues to refine its planning standard operating procedures (PSOP) to reflect roles and responsibilities during the planning process and ultimately produce and brief a simple operation order (OPORD) in a time-constrained and tactical environment.

With the receipt of some range products and written battalion order, I was able to put together a basic written warning order. This facilitated some foundational understanding of the terrain, enemy, and task and purpose for each platoon to conduct

Soldiers from C Company, 1-27 IN disperse to cross an open danger area (ODA) under the cover of artillery obscuration and suppression.

parallel planning. However, common understanding wasn't achieved until we blocked off about one hour with all leaders in the conference room to complete course of action (COA) development collectively and emplace key graphic control measures on the common operating picture (COP). This step can be replicated in the field in a tactical assembly area (TAA) given adequate security. I used the AGADAP steps (analyze relative combat power, generate options, array initial forces, develop schemes of maneuver, assign HQs, prepare COAs) as a framework for this meeting, and we collectively walked away with clear requirements to refine manifests and equipment distribution to complete the mission. I would recommend an additional step during this touch point: include a terrain model or map walk-through to replicate a wargame session resulting in a detailed timeline during execution (essentially a rough sync matrix). This would have helped my FSO visualize and time fires to enable our maneuver plan and significant maneuver constraints (range and terrain based).

Once maneuver elements know their general scheme of maneuver (SOM), take the time to rehearse collectively over a map or terrain model early in the planning process. This will assist the FSO/fire support NCO (FSNCO) in grouping targets and building a sound and adequate target list worksheet (TLWS). If the company commander sits under his poncho Ranger School-style and writes the whole order, the plan is less likely to get the "buy-in" and ownership at the platoon level.

Mission command — The CALFEX enabled us to validate our mission command SOP that we developed the previous year. In short, establishing a primary and alternate command post (CP) inside the company task organization allows for maximum flexibility and redundancy in a force-on-force or decisive action training environment (DATE) scenario.

During the training leading up to CALFEX, we tested multiple radio configurations and dedicated a lot of resources toward replacing and maintaining our antennas, Peltor headsets, tactical satellite (TACSAT), and handheld radios. We also hand-picked some of our best talent from the line to be RTOs. Despite all these efforts, we consistently had trouble with old equipment and equipment previously identified as requiring technical maintenance. What I learned is that troubleshooting commo and maintaining charging equipment is the lifeline that we needed to keep us spread out and moving fast. Most of our delays in tempo were a direct result of poor communication on the net or

breaks in communication due to lack of redundancy.

This is not a profound lesson, but it is worth noting as we prioritize our limited time and resources. When we conduct platoon and below training, we usually have plenty of commo equipment to go around, but when the company is out in force, every single piece of commo equipment that goes down starts to have a significant impact on our ability to spread out and move fast.

After the first late attempt to integrate Delta Company trucks into the counterattack while processing fire missions, coordinating rotary-wing (RW) forward arming and refueling points, adjusting security, and moving casualties to the rear, I became consumed with trying to direct too much traffic at once. The only way to get multiple fires put out simultaneously was to dedicate my XO onto the objective and offset some reports to him. The trade-off was that the company command net became mostly his and the 1SG's while I focused on face-to-face reporting with PLs and relying on the company fires net to fight the enemy. I kept one ear on company fires and the other ear on company command. My RTO monitored company and battalion command. If I needed to plug in, he kept a spaghetti cord push to talk (PTT) so I could jump on quickly and plug into his PTT with battalion. My FSO monitored company and battalion fires. This worked well as he started to only update me on what I couldn't hear on battalion fires. He figured out that I could hear all of the RW traffic; so instead of repeating everything, he just asked, "Sir, did you hear that?" if I needed to make a timely decision or clear RW hot. This FSO/commander working relationship was critical to our success on the last couple missions.

Having two distinct CPs located on the battlefield — one mounted ("CP Gold" led by XO) and one dismounted ("CP Black" with the commander, FSO, and RTO) — clarified reporting hubs during the course of execution and placed the decisive operation (DO), shaping operation (SO)1, SO2, etc., under a CP for reporting. Additionally, as we build flexibility into any plan, two CPs provide redundancy and clear succession of command that is more practical than simply designating individual leader succession of command that may prove impractical during particular phases of an operation.

Integration of enablers — As we build our combined arms

experience, it's essential that we develop working experience with our attachments whenever possible. Last year, we received organic battalion enablers, brigade organic attachments, and some division assets. Leveraging these assets was absolutely decisive to destroying enemy in the defense and offense during company and battalion missions (battalion reconnaissance and mortars did most of the damage to the enemy). During the CALFEX, we specifically leveraged field artillery and engineer assets at the decisive point, and notional RW assets were a combat multiplier during the assault.

Having developed an SOP for task organization in a basic offensive and defensive framework, it is easier to conceptualize how to task organize my organic leaders to facilitate mission command. It was not as easy integrating enablers. Additionally, enablers caused the largest amount of friction due to our reliance on SOPs in the planning and execution of the mission. It was easy to attach all the enablers to an organic mission command node (i.e., engineers were attached to 3rd Platoon, and gun trucks were attached to 1st Platoon). However, the learning curve was greater during the planning period since these enablers attached late and had to learn our SOPs and equipment fast. I should have taken more time up front to familiarize enablers with our SOPs. This is a generic lesson we always hear, but specifically it matters with reporting chains and who "owns" each enabler. By the third and fourth iteration, we had it down, but in a DATE scenario and force-on-force training, it will be very important to conduct capabilities briefs and identify critical elements of our SOP up front that cause friction. Here are a few elements that we encountered during our CALFEX:

- Call signs, frequencies (enablers need to get on battalion commo card), and command relationships to supporting command, especially RW assets

- Minimum force requirements to accomplish task/purpose and achieve endstate

- Memorandums of agreement for storage of weapons and sensitive items during operational control (OPCON)/tactical control (TACON) relationship

- Special equipment and support requirements (i.e., FSNCO brings a Lightweight Laser Designator Rangefinder [LLDR] but no way to charge batteries; some equipment needs to be on a truck for portions of movement)

- Uniforms and packing list SOP (avoid: "my headquarters doesn't issue that")

In addition to SOP understanding and enabler capabilities awareness, with respect to mission command, reporting and radio brevity was not standardized until our last few iterations. In this regard, CALFEX proved to be an excellent training event to cement our tactics, techniques, and procedures (TTPs) — specifically our methods for integrating enablers. As we move forward, we can anticipate these challenges and standardize our integration of enablers and plan for the necessary briefs, orientation, and time to do so. We won't always have a "dry run" to get it right.

CPT Dave Blanton, commander of D Company, 1-21 IN (Dragon 6)

From my standpoint, the CALFEX really helped us to hone TLPs, enabler synchronization, company-level maneuver, and enhanced direct fire control measure understanding. I was impressed by the abilities of our PLs/platoon sergeants and their ability to coordinate and synchronize a company-level attack. A few key points from our standpoint:

TLPs — Conducting the orders process is often overlooked at the company level. In many cases, we take for granted the abilities of officers and NCOs to participate in this process. The CALFEX planning timeline allowed our company to review the orders process and develop TTPs for OPORD briefings that we will carry forward in the future.

Our company divided sections of the company OPORD among PLs and HQs NCOs to brief. This approach allowed young leaders to review the doctrine and then conduct their own analysis. While we conducted a few tedious rehearsals to perfect this approach, I believe it will pay off greatly in the future. Having leaders in the company brief the order and lead company rehearsals provided "buy in" to the plan, developed leaders for future responsibilities and professional military education (PME), and really helped us to "put 10 heads together, instead of one" to develop a plan that makes sense. We transitioned to this approach as an organization last year and gained a lot of efficiency from this technique.

Enabler synchronization — As a mounted force, tempo is paramount to seizing the initiative in a close fight. If timing is off, the potential to desynchronize fires, air, and intelligence collection at the company level becomes challenging if not impossible. The time-old technique of rehearsing really allowed us to practice our timing.

Sappers from B Company, 65th Engineer Battalion maneuver toward an obstacle by throwing a grappling hook to clear their path for mines. Sappers reduced wire obstacles during the assault using both live Bangalore torpedoes and live brazier charges.

Additional rehearsal enablers like Virtual Battlespace 3 (VBS3) were incredibly helpful for a mounted unit. VBS3 allowed us to rehearse multiple contingencies quickly. We spent three hours in VBS3 and rehearsed four full iterations and three contingencies in that time. It provided our leaders a near realistic view of the terrain and allowed us to AAR our own rehearsals.

Lastly, having the right graphic control measures for not only your primary COA, but in support of a most dangerous COA or alternate COAs, provides leaders options to help resynchronize maneuver if fires are delayed (or early), etc. The control measures must be understood across and above the organization. Standardizing Joint Capabilities Release (JCR) graphics is a great way to do this.

Company maneuver — While Oahu has restricted terrain that makes practicing company-level maneuver difficult for a mounted formation, it is an essential training task for every unit. In the spring and summer, we tried to bridge the gap using VBS3 and the Reconfigurable Vehicle Tactical Trainer (RVTT). Both these systems are useful but are ultimately not a substitute for a live training environment. The hardest thing for mounted units to train on is the transition from movement to maneuver.

Mounted movement is relatively simple and allows units to conduct quick movement to get into a position to come in contact with the enemy. Once a mounted unit deploys into a formation and begins to bound, maneuver becomes more difficult and takes a graduate-level approach. The CALFEX terrain afforded us a great opportunity to analyze terrain and the enemy during our dry runs. Simple tasks like seizing a battle position, conducting bounding overwatch when enemy contact is likely, and designating a target array and firing pattern are tasks that we ask platoons to do automatically, but we often take their proficiency for granted.

Direct fire control measures (DFCMs) in a limited visibility environment — Use of easily identifiable graphic control measures are important for operations at any time but essential during times of limited visibility. Soldiers and NCOs can do a lot to enable the success of a unit during limited visibility conditions. Proficiency in boresighting thermal optics, use of machine gun traverse and elevation at night, and thermal calibration on stabilized weapons systems are just a few examples.

Leaders, however, must ensure that thought, planning, and guidance are given to account for DFCMs by using the right weapons system for the right target, preparing for degraded mode operations, avoiding target overkill, and properly distributing direct fires. A true test of a company's proficiency is executing operations in these conditions. In the future, doing this both at night while under CBRNE (chemical, biological, radiological, nuclear, and high-yield explosives) conditions would allow the company to gain even greater proficiency.

D/1-21 had the great benefit of reading everyone else's lessons learned from previous iterations before conducting our CALFEX. This training event was extremely useful to help us see ourselves and continue to work to improve our weaknesses and capitalize on our strengths.

A Soldier from B Company, 1-21 IN employs an M2 .50 caliber machine gun to suppress the objective while engineers breech an obstacle. Moving dismounted with the M2 for more than a kilometer proved difficult, but it provided a very robust support-by-fire position.

CPT James McLaughlin, commander of C Company, 1-27 IN (Coldsteel 6)

Simplification and delegation — Something I struggled with, especially in the early iterations, was balancing control versus command. We naturally feel that being closer to the fight gives us better understanding and will allow us to better pace the attack. On my day blank fire, I ironically ended up losing sight of the overall fight by moving forward and trying to gain more understanding. I came to the realization that the less running around I was doing, the more effective I was. What helped me the most with this was handing what I thought were company-level decisions (i.e., initiating the SBF, calling indirect fire targets, being responsible for triggers) over to PLs. By placing this trust in PLs and letting them be responsible for the execution of maneuver, my tempo improved, my formation was more flexible, and I was able to think deeper into the fight. The second and third order effects of this were that my PLs were more confident, better trained, and able to take disciplined initiative within my intent. Moving forward, I'm coaching them to be asking for assets and to start trusting the decisions I've given them down to squad leaders. That way, PLs can start fighting in depth and allow us commanders to move from thinking two moves ahead to four moves ahead.

Fires planning — Understanding how to make fires responsive and timely was a struggle. Interestingly, both my FSO and the FSO I observed in another company found solutions with completely opposite methods. We grouped our targets and limited our fires to three simple groups: one to disrupt and fix, one to suppress and obscure on the objective, and one to continue suppression and start fighting in depth. The company I observed gained responsiveness by separating out their targets and calling exactly what they needed, thus eliminating the need for all assets in a group being ready to fire. Both methods proved successful, and it was worthwhile seeing both techniques. The other critical piece in fires planning was who calls the mission and when. While we always like to give the mission to either the FSO or the element with the best

"eyes," it was my observation that the unit in the lead or the unit triggering an action was best suited to call that fire mission. It typically eliminates the forward observer to FSO/commander step (enabling the FSO to play more of a "conductor" role) and ensures that the unit in the best position can call that mission.

Gaining and maintaining enemy contact — Where we start to move from science to art is when do we move from simply visual contact to indirect and direct fire contact? Personally, I think that initiating with indirect fires early is beneficial, but it does come at the cost of surprise and massing effects. As for direct fires, do we want to start emplacing them prior to a critical action or at the moment of it? On my day blank-fire iteration, we used direct fires to cover a prolonged period of movement into our assault position and then cover the assault. While I'd say it was moderately successful, I think it enabled the enemy to effectively orient on my SBF for little gain. We eventually settled on initiating direct fire once one full platoon reached the assault position. I think this struck a good balance between initiating too early and initiating too late. Again, it may not necessarily be the right answer, but it definitely worked for our company.

Controlling formations during a company-level assault — This was a struggle at every echelon from my level down to the squad level. Leaders were very proficient at maneuvering their individual squads or platoons, but the cross-coordination between elements was lacking. This again plays into the art of how we conduct an assault. How much of this is the higher HQ (i.e., a commander directly controlling platoons or a PL directly controlling squads) and how much of this can be handled by cross-talk between formations? What seemed to be the most effective was letting leaders cross-talk in order to gain awareness in space and have the higher HQ focus on time and tempo. Without getting too bogged down in how my platoons were fighting, this allowed me to control the pace of the attack while still empowering PLs and enabling them to maintain awareness about their flank units. During the night live fire, all I did was occasionally adjust the speed of a platoon's assault in order to keep synchronization while letting the tie in and boundary between the two platoons be handled at the platoon level. Finally, a good lesson learned was analyzing when and where I wanted to mass formations versus massing effects. Taking time to let situations develop and understand that you can afford to keep a platoon out of the fight until a critical moment simplifies control, reduces risk to force, and enables massing at the decisive point versus just being a massed target.

Synching triggers, actions, and time — This echoes CPT McAdams' last comment, but synching our triggers and actions in time and space is possibly the biggest challenge for us as commanders. As we progressed throughout our iterations, using fewer and more noticeable triggers (i.e., the reduction of the breach, crossing the phase line we placed at the lip of the gulch) enabled us to "flatten" our triggers and increase tempo. Furthermore, reducing the number of radio calls decreases the amount of friction and time you spend trying to set up your next action, enabling more tempo in the attack. At the end of the day, we want our triggers to help us in the fight, not us having to fight our triggers. CPT Voss and I also had some great discussions on what conditions had to be set in order to trigger an action (i.e., do you have to wait for your whole company to reach a phase line or can you move forward once your lead element hits that trigger?).

There's no question I had a lot of learning to do, and it was fun seeing both my company and myself get better each time. What was even better is seeing the skill present in this group of commanders. I'm humbled to be included in this group.

CPT Tom Hood, commander of A Troop, 2nd Squadron, 14th Cavalry Regiment (Ace High 6)

Overall, I was very impressed with the tactical skills of my PLs and platoon sergeants. By the time we actually got to the execution of the lane, most of my hard work was done and the other leaders within the troop took up the mantle to coordinate and synchronize much of the operation in real time. The CALFEX did provide the opportunity for my headquarters and I to become proficient before Lightning Forge. We thought we had worked out the kinks during our troop situational training exercise (STX), but it cannot be overstated how important it is for my organization to have four working FM radios (and then working backups), a working JCR, the ability to clearly monitor all those nets, and then the ability to battle track and report all to squadron, all located within the back of a shelter utility truck which can only fit three (maybe four) Soldiers at a time. The first couple of dry runs were humbling for us, but we adjusted some CP SOPs and came out of the exercise a more efficient team. This brings me to my first key point:

Rehearsing contingencies — I'll ditto what CPT Blanton said about the importance of rehearsals with enablers, the helpfulness of the VBS3, and how tempo is paramount for a mounted force. I'll add that, particularly for a reconnaissance unit, it is beyond important to rehearse contingencies or the "what ifs." So, my troop took a little time to go over various contingencies for the operation and ensure that all leaders, from the section leaders up, understood what actions they were to take and to create synched graphic control measures for those contingencies. We will need to do many more for the upcoming operations. I find that I often gloss over this step during TLPs, and it cannot be overstated how important it is for the subordinate units to know what they are supposed to do when things do not go according to plan, as so often happens to recon.

Leader location — After reading many of the previous commanders' AAR comments regarding their locations throughout the operations, I considered the benefits of operating alongside the platoons or operating at my CP. I understand the importance of being at the decisive point in order to deconflict friction points, but most of my friction points occur over the net between assets kilometers away from one another. Many of the Infantry commanders I know leave that monitoring to their XO, as did I; however, the benefits of the reconnaissance commander being where all the information is passing and deconfliction is occurring outweighs the benefits of me being at the decisive point assisting my PL. Additionally, I earn my paycheck when things go wrong, and I need to be where I can have the greatest effect when that occurs.

I decided during the CALFEX that the only time I would travel with a platoon is when they are initially setting in their screen so I can get an understanding of the terrain and conditions my

troopers will be observing and ensure it matches my briefed intent. I felt that there would be a benefit to traveling with a subordinate unit and then traveling back to my (established) CP for the rest of the operation.

Enabler locations — We had two enablers physically attached to us throughout the operations: a FIST, which we work very closely with regardless, and an engineer response team (ERT). My FSO and his team did an excellent job of deconflicting fires with aerial enablers and distributing priorities of assets to each to my PLs in order to maximize effects on the enemy. However their vehicle, which was equipped with a more effective Long Range Advanced Scout Surveillance System (LRAS) than our own, was parked next to my CP throughout the operation. The ERT was responsible for either breaching or setting up a bypass for an obstacle, but the team's vehicle also was LRAS equipped. The ERT, however, stayed at the obstacle after the bypass and did not move until the platoons passed back through. I quickly forgot that my FIST, my attached enablers, and my mortars can be reconnaissance assets and help observe when they are not engaged in their primary task for the operation.

A unit's enablers can assist in some way when they are not executing their primary task. It can be anything from observing a named area of interest (NAI), to providing security, to supplementing an offensive or defensive force. At the very least, I should have utilized them to the greatest extent possible during all phases, and it is my responsibility to provide that guidance, just like it would be for one of my platoons.

Violence of action — Both the brigade commander and command sergeant major emphasized violence of action to my platoons for their retrograde from the screen lines while "under fire." Cavalry units are by nature very deliberate organizations. Most of our operations are stealthy and deliberate. It was a mental leap for my troopers to switch mindsets and increase the tempo of their movements. I am happy to say though that after the day live fire and the emphasis on violence of action, my platoons executed much more quickly during the night live fire. I just have to remember that when we conduct training for an operation or rehearse, we need to train it both deliberately and forcefully if applicable. That ensures my troopers are able to easily switch mindsets depending upon the circumstances they find themselves in.

Overall, my entire organization is much better now than they were before the CALFEX, and we will continue to improve throughout Lightning Forge and JRTC.

CPT Dan Ferry, commander of B Troop, 2-14 CAV, (Bountyhunter 6)

In the same fashion as those who have gone before me, below are some of our lessons learned from our CALFEX iteration. Since our mission was vastly different than any of the other units that had gone (to include the mounted D companies and our squadron's dismounted reconnaissance troop), I'll lead with our mission, which was to screen in depth in order to deny the enemy the ability to counterattack. This mainly called for us to synchronize enablers as we observed an advancing enemy force. I was extremely impressed with my PLs, platoon sergeants, and junior leaders for the way they took initiative

during the entire operation — specifically, the way they were able to handle enablers at their level and synchronize assets pushed to them. Additionally, the communication between the platoons demonstrated a shared understanding of direct fire planning and locations on the battlefield, allowing for easy deconfliction of direct fires and, again, synchronization of fire support assets during periods of maneuver. What follows are lessons learned that we will definitely carry with us into Lightning Forge and beyond.

Fires rehearsal and establishment of priority targets — Our CALFEX was a great reminder that no matter what the circumstances, we have to make time specifically for the fires rehearsals, especially when we have the amount of assets we had engaging targets (close combat attack [CCA], FA, mortars). The biggest lesson learned throughout the day was prioritizing targets and making certain targets priority targets. Priority targets are obviously targets that the guns will orient on again after firing a different mission, which helps greatly when you know which part of the battle is coming next. If platoons know the operation will open with CCA and then move to FA, then they can assign each asset a different priority target. Once that fire mission is over, look to your next anticipated move and change your priority targets — do not just let the guns return to a target you know you are not going to use again. We were able to learn that early during our day iteration, which made for an immensely smoother night iteration.

EXCHECK — Our EXCHECK was rather long — possibly excessive. I thought it best to cover as much as I could with

Mortarmen from the 1-21 IN mortar platoon provide both 120mm and 81mm mortar support for the assault.

the EXCHECK to free up precious radio time as we all know the net gets clogged once contact is made. However, with a lengthy EXCHECK, some subordinate level leaders might not be tracking what adjacent units are doing because they're focused only on the pro-words that apply to them. Make sure that the EXCHECK is disseminated to everybody and covers the most critical events that you anticipate. Additionally, as others mentioned rehearsals of contingencies, also have major contingencies covered by the EXCHECK so Soldiers can react quickly to a change in plans. The bottom line is that everyone in the troop needs to know the playbook.

CPT Jon Neidig, commander of C Troop, 2-14 CAV (Combat 6)

Although we had a slightly different scenario than the infantry companies, we learned many of the same lessons. Our mission was to conduct an area reconnaissance of the objective in order to identify a high value target and then transition to a hasty raid to destroy that target when ordered.

Need for a troop tactical SOP (TACSOP) — As we prepared for the CALFEX, we noticed our team leaders were falling short on pre-combat checks (PCCs). Equipment was forgotten or not ready, and Soldiers were unclear on TTPs and battle drills. At first, we contributed this to team leaders needing more development or lacking initiative. As we looked at the issue more, we realized that we weren't setting them up for success because we didn't have a troop TACSOP to serve as guidance. We developed a TACSOP to clarify expectations of leaders throughout our formation, which will allow our troop to more effectively fight and win.

Coordinating and leveraging assets at the troop level — Developing a deliberate deconfliction of assets enabled us with continuous support from indirect and aerial assets. We used time and space for this deconfliction. Giving the aerial asset as a southern boundary allowed us to mass fires from both aviation and artillery. Using phase lines allowed us to efficiently request and receive those effects.

Fidelity of reporting — As a reconnaissance formation, our value in the fight is the information we can collect. If that information is not reported rapidly and accurately, we aren't doing our job. Standardizing and teaching reporting formats will allow us to synthesize a picture of the battlefield that will enable the brigade to find and kill the enemy. We are generating small reporting cheat sheets that will allow our teams to generate reports quickly and effectively.

Mastering battle drills — There was some initial skepticism within my troop when we found out we were executing a hasty raid for the CALFEX. "That's not something we would really do" was a sentiment that we had to squash immediately. During execution, the troop accepted and owned that we could be called on to execute such a mission. Getting missions that are outside of your mission essential task list (METL) is something no leader or unit should be surprised by or fight against. We discovered through executing a hasty raid that we need to work on our battle drills. This is an area for which every unit, regardless of mission set, should be prepared.

In Closing

After deliberate recovery from the CALFEX, the 2nd IBCT went into planning for Operation Lightning Forge, a brigade-level, home-station training event that provides a CTC-like experience. The lessons learned from the CALFEX proved instrumental in the brigade's success during this operation. The transparent AAR process initiated discussion from a shared point of reference between commanders and staffs to refine TTPs and SOPs. This allowed the CALFEX to not only fulfill the U.S. Army Forces Command requirement to certify companies and troops prior to live-fire exercises at JRTC but also help the brigade become more cohesive and lethal at echelon. By learning from each other's mistakes, the companies maximized the robust investment of training resources and manpower leveraged from across the brigade.

Soldiers from B Company, 1-27 IN bound as part of a fire team from their assault position toward the breach site. The objective required extensive use of individual movement techniques, emphasizing the importance of basic Soldier skills and physical fitness.