

BATTALION CALFEX AT JRTC

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In 1996, after only three years in operation, the Joint Readiness Training Center (JRTC) at Fort Polk, La., opened Peason Ridge for live-fire training. At the time, the focus of combined arms live-fire exercises (CALFEXs) was on the platoon and company levels.¹ A CALFEX facilitates a much higher proficiency level for force-on-force training, enabling units to emerge from the Combat Training Center (CTC) at an even higher experience level. JRTC's goal was to build towards facilitating company- and battalion-level CALFEXs.

JRTC has come close to meeting its goal of conducting battalion CALFEXs, but until April 2015 they could only claim partial success. The closest JRTC has come to meeting a battalion-level CALFEX was in the late 1990s, with companies conducting live-fire training in sequence on an objective. Between 2004 and 2012, units training at JRTC were preparing for combat deployments to Iraq and Afghanistan. Although the live-fire training remained, the counterinsurgency environments required emphasis on convoy live-fire training more than CALFEX. Due to the Army Force Generation (ARFORGEN) process, time constraints, and non-standard mission requirements, core competencies fell to the wayside.² CTCs were putting emphasis on mission readiness exercises (MREs) rather than company- and battalion-level maneuver training.

After a decade of focusing on counterinsurgency and full spectrum operations, JRTC shifted its focus. In 2012, the implementation of unified land operations in a decisive action training environment (DATE) began with Rotation 13-01.³ Since then, DATE scenarios have become common place at JRTC. And with this change comes the return of the CALFEX. However, this is not the CALFEX of the 1990s.

Most combat leaders who have experienced JRTC know the value of the CALFEX. Live-fire training not only replicates a war-like environment, but it also helps condition Soldiers to engage the enemy. In the opening pages of *On Killing*, LTC (Retired) Dave Grossman describes the enormous value these exercises have on conditioning Soldiers. He argues that even when Soldiers are exhausted and deprived they will still function with proper conditioning.⁴ Furthermore, to be successful on the battlefield, leaders must know the limits of their weapons and Soldiers. So certainly, no one will argue against the value of live-fire training.

Unfortunately, the overwhelming majority of leaders have never experienced true battalion-level live-fire training at JRTC, much less trained for it at home station. But don't worry, this is not an impossible task to overcome. Having



Soldiers with the 1st Battalion, 327th Infantry Regiment, 1st Brigade Combat Team, 101st Airborne Division (Air Assault) fire and maneuver to their object during a battalion live fire at the Peason Ridge training area on 10 April 2016. (Photo courtesy of the JRTC Operations Group Public Affairs)

Event	HQs	Platoon	Platoon	Squad	Mortar	Battery	Aviation
Light/Heavy Deliberate Attack	X	X	X	X	X	X	X
Ambush		X					
Movement to Contact		X	X		X		
Trench		X	X		X		X
Raid	X		X		X		
Convoy Security	X		X				

Figure 1 — Menu of LFX/Unit Participation from FORSCOM Regulation 350-50-2 (July 2000)

recently experienced the planning and execution of the 1st Brigade Combat Team, 82nd Airborne Division's JRTC Rotation 15-06, I know leaders can succeed at executing a battalion-level CALFEX at the JRTC. This article describes the JRTC battalion-level CALFEX, highlights its value global response force (GRF) and regionally aligned forces (RAF) training, and offers a practical framework for home-station battalion-level live-fire training.

The JRTC CALFEX: The 1990s vs. 2015

The purpose of the JRTC CALFEX is to validate training proficiency. The goal is to tailor training to the operational environment, optimally from the platoon to battalion level.⁵ However, until April 2015, JRTC had not conducted a live fire above the company level. The closest example of a battalion-level, live-fire event (as seen in JRTC Rotation 15-06) was between 1996 and 2002. During this period, the CTC trained rotational units to defeat a near-peer adversary rather than to attain proficiency in counterinsurgency operations.

To understand the JRTC CALFEX concept during that time, we must look at three areas: location, organization, and execution. Prior to 1996, live-fire training was in the Fullerton training area — “the Box.” This meant live-fire training took place relatively close to the force-on-force maneuver space. Having a short distance to travel for training simplified platoon and company movement as well as the logistical planning for ammunition, food, and other life support. However, much of the maneuver areas closed during live-fire training because of the surface danger zones within Fullerton.

“Surface danger zones are the ground and airspace designated within the training complex (to include associated safety areas) for vertical and lateral containment of projectiles, fragments, debris, and components resulting from the firing, launching, or detonation of weapon systems to include explosives and demolitions.”⁶

As a result, live-fire training occurred prior to the first force-on-force training day — D-Day.⁷ In 1996, the JRTC moved its live-fire training area from Fullerton to Peason Ridge. This move added a distance of roughly 20 kilometers, significantly increasing the rotational unit's planning and logistical requirements for conducting a CALFEX.

In addition to relocating to Peason Ridge, JRTC's organization of the live-fire division was a critical component of live-fire training. The live-fire division used a seven-team model.⁸ The training objectives determined the design and scenario of each team. Team 1 was a movement-to-contact team for light and heavy forces. Team 2 was the ambush and village training team. Team 3 was trenches, the ditch-like network of fighting positions reminiscent of World War II. Team 4 was artillery. Team 5 was the Special Operations Forces (SOF) team. Team 6 focused on specialized training. Team 7 was the armor and mechanized team. Collectively, these core live-fire observer-controller (OC) teams made up the live-fire division. There were no force-on-force OCs.

In July 2000, JRTC published an update to U.S. Army Forces Command (FORSCOM) Regulation 350-50-2, *Training at the Joint Readiness Training Center*. Based on the brigade commander's training requirements, units also had a menu of options for executing live-fire training. It included light and heavy deliberate attack, ambush, movement to contact, trench, raid, and convoy security (see Figure 1). The menu also put emphasis on the squad and platoon levels. Prior to executing a CALFEX at the JRTC, units had to meet the following prerequisites:⁹

- Units must have completed live-fire training within the last six months at home station.

Heavy force units participating in live-fire must:

- Have qualified all anti-armor crews on table XII within the last six months;
- Provide copies of the most recent tank or Bradley crew gunnery skills test; and
- Bring the original weapons data card (DA Form 2408-4) for each vehicle.

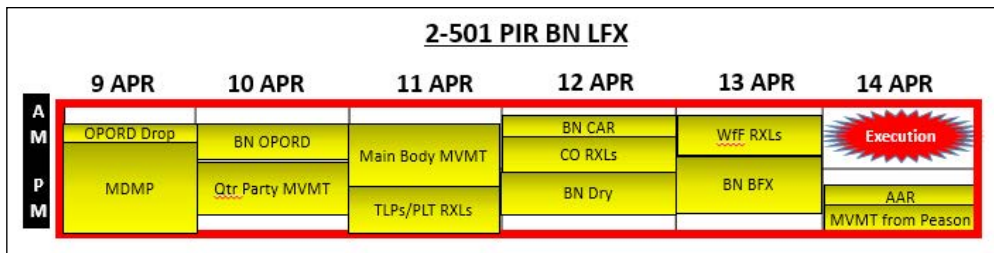


Figure 2 — The JRTC Live-Fire Iteration Timeline (April 2015)

Indirect fire units participating in live-fire must:

- Ensure all participants are command safety certified by the battalion commander;
- Bring the original weapons data card (DA Form 2408-4) for each vehicle; and
- Establish a method to check all mortar firing data.

Typically, live-fire training took two days, running into the early morning of the third day depending on the scenario chosen and experience level of the unit. The first day consisted of administrative preparation and tactical planning. Units coordinated for food and logistics to sustain the force for a period of 48 hours. This included developing a wish list for the types of ammunition the unit wanted to train during the live fire. Platoon sergeants would have to distribute the different types of ammunition to their squads using the same planning considerations as in a combat environment. Simultaneously, the company commanders and platoon leaders would conduct tactical planning. Using the Army's troop leading procedures (TLPs), junior leaders would receive an operation order (OPORD) with a specific mission and end state and determine how to address the problem. The outcome of their planning resulted in an executable plan on day 2.

Day 2 consisted of rehearsal and execution with live ammunition. First, units would rehearse their plan to refine and visualize their concept the operation. This also offered the live-fire OCs a litmus test on the proficiency of the unit; a technique still used today. Units not proficient after several rehearsals would conduct live-fire operations in the daytime only to mitigate risk. Those units conducting the nighttime task would attack their objective at 0200. The live-fire training would culminate at 0500 or when units became combat ineffective.

From 1996-2002, rotational units that trained as a battalion never conducted the live fire as a whole battalion during execution. Although a battalion-sized element received the mission and planned for its execution, companies conducted rehearsals and executed separately from the battalion. Additionally, multiple companies completed live fires sequentially. Company A would attack an objective followed by Company B attacking a different objective. Thus, only one company was on an objective at a time, and companies did not attack multiple objectives simultaneously.

Today, the live-fire division has improved its ability to provide complex training, providing a true battalion-level CALFEX experience. Proof of this comes from looking at its multiple locations, organization, and execution. The Army has invested significantly in funding Fort Polk with the Digital Multi-Purpose Battle Area Complex (DMPBAC), Combined Arms Collective Training Facility (CACTF), and Shughart-Gordon Military Operations in Urban Terrain (MOUT) site as additional off-site locations that rotational units can request for training.¹⁰ However, Peason Ridge training area remains the primary location for conducting live-fire training.

The live-fire division now has a smaller organization with fewer teams. The live-fire division's mission command structure includes the live-fire chief, deputy, command sergeant major, supply sergeant, operations section, and teams. There are three true teams to support live-fire training. The first is the maneuver team which includes three teams. The second is an indirect fire team. The final team includes a single Special Forces trainer and an aviation liaison. Although the live-fire division is smaller, it can easily facilitate a battalion-level CALFEX when partnered with force-on-force observer-coach-trainers (OCTs).

To simplify operations during the battalion-level CALFEX, the live-fire division is dependent on force-on-force OCTs to provide coverage. During the 2nd Battalion, 501st Parachute Infantry Regiment's (PIR's) JRTC rotation in April 2015, the live-fire division managed live-fire safety and the overall execution of the training while the force-on-force OCTs assigned to 2-501 PIR facilitated the live-fire training by:¹¹

- Issuing the battalion OPORD to the rotational unit;



Soldiers with the 1st Battalion, 327th Infantry Regiment, 1st Brigade Combat Team, 101st Airborne Division (Air Assault) prepare to breach a building during a battalion live fire at the Peason Ridge training area on Fort Polk, La., on 10 April 2016. (Photo courtesy of the JRTC Operations Group Public Affairs Office)

- Receiving the rotational unit back brief;
- Controlling unit pickup and movement to Peason Ridge;
- Facilitating classes and dry rehearsals;
- Facilitating full mission profile rehearsals;
- Conducting change of mission and live-fire after action reviews (AARs); and
- Controlling unit pickup and return from Peason Ridge.

Using this method, the live-fire division was able to focus on realistic, rigorous, and safe training within the scope of the battalion commander's training objectives. This benefited the force-on-force OCTs as well, giving them a holistic look at the unit they were mentoring.

The JRTC still offers units a menu of one or a combination of missions based on the brigade commander's training objectives.¹² Similar to the 1990s, units must complete a list of prerequisites prior to live-fire training at JRTC. These include:¹³

Maneuver Units:

- Units must complete a like level live-fire exercise (LFX) under similar conditions in the last 180 days (not a show stopper — habitually see units come to JRTC trained one level down).
- All Soldiers must have qualified on their assigned weapons within the last 180 days.
- All Soldiers must arrive at JRTC with zeroed weapon systems (both iron sights and optics).

Indirect Fires:

- Units must complete a like level LFX under similar conditions in the last 180 days (not a show stopper — habitually see units come to JRTC trained one level down).
- All Soldiers must have qualified on their assigned weapons within the last 180 days.
- All Soldiers must arrive at JRTC with zeroed weapon systems (both iron sights and optics).

Battalion Live Fire:

- Leadership stabilization for weapon squad leader and above.
- Company level day/night live fire within the last six months.
- Company fire support coordination exercise within the last six months.

Exceptions to Policy:

- Brigade commander memorandum to the commander, Operations Group (COG).

The execution is by far the most impressive aspect of the battalion-level CALFEX. It took seven days for the 2-501 PIR to execute the JRTC's first battalion-level live fire. For 2-501 PIR, training began on 9 April 2015. The unit received a battalion OPORD from the OCTs. On the second day, 2-501 PIR completed battalion-level planning and issued a battalion OPORD. Soon after, the battalion began movement of the quartering party to Peason Ridge to establish its tactical assembly area. By 1400 on 11 April, 2-501 PIR had all its Soldiers on the ground at Peason Ridge and began company OPORD and TLPs.¹⁴ Day four was dedicated to the battalion combined arms rehearsal and dry rehearsal. Day five was the blank fire. Day six was the execution day; 2-501 would attack with Alpha, Bravo, and Delta Companies on one objective followed by Charlie Company attacking two objectives sequentially. Following the execution, 2-501 PIR conducted AARs and redeployed from Peason Ridge.

The description above only scratched the surface on live-fire training. The JRTC live-fire training is the most realistic live fire units will do short of combat.¹⁵

The Value of the CALFEX in GRF and RAF Training

While the future is unknowable, combat readiness training remains essential for the GRF and RAF. The CTC CALFEX is the cornerstone of this training. Units that experience a CALFEX emerge from the CTC at a higher readiness level. It replicates combat conditions, educating leaders on the capabilities of their Soldiers and their weapons. Additionally, CTCs replicate battlefields where a commander can try new concepts without the fear of failure.¹⁶

The learning begins with a combined arms maneuver live fire. Leaders get a chance synchronize direct fires, mortars, artillery, and aviation. This forces leaders to think through:¹⁷

- Movement techniques
- Direct fires suppression
- Marksmanship
- Weapons discipline
- Battles drills
- Demolition

Rigorous and repetitive rehearsals is a core building block to live-fire training. The JRTC live-fire division uses the crawl-walk-run approach to the CALFEX. In the crawl phase, rotational units receive classes and complete dry rehearsals. The objective is for units to demonstrate proficiency in the key tasks required to execute their live-fire scenario prior to starting full dress rehearsals.¹⁸ At JRTC, the rehearsals and actual live-fire training typically occur in separate locations. Every unit will conduct a minimum of two full mission profile rehearsals to validate their scheme of maneuver.¹⁹

In the walk phase, the training unit demonstrates its understanding of fire support coordination. During the fire support coordination exercise, platoon leaders and forward observers hone their skills in the employment of aviation and indirect fire assets. Unit leaders and the fire support team will describe overall guidance for fires and the fire support execution matrix for the mission.²⁰ The integration of aviation assets is essential to this training. As part of the "walk and shoot," platoon leaders will control the movement of real aircraft under the supervision of the forward observer, thus solidifying the relationship between the platoon leader and forward observer.²¹ Once units demonstrate proficiency in the walk phase, they are ready for the actual live fire.

The execution of the live fire is the run phase of training. JRTC conducts a series of checks prior to the first weapon fired. In addition to checking aviation, indirect fires, and mortar assets, safety mechanisms are also reviewed.²² Once completed, the training unit receives clearance to start the mission.

GRF and RAF must be ready to deploy in an unfamiliar environment at a moment's notice. Preparing for uncertainty is a phrase that will remain in our military lexicon. This is because high intensity conflicts are just as likely as humanitarian assistance operations. To be successful on the battlefield, the commander must know the capabilities of his weapons and Soldiers. And a battalion CALFEX at JRTC provides this opportunity. The challenge comes when deciding where to put emphasis during home-station training.

Home-Station Training: Back to Basics

There is no silver bullet to executing a CALFEX at JRTC. However, mastering the basics of mobility operations is a good start. According to recent live-fire division observations and the JRTC trends published in Fiscal Year 2014,

home-station training must focus on:²³

- Squad- and team-level proficiency
- Mission command
- Asset management
- TLPs
- Maneuver

For squad and team proficiency, units should leverage the Army Training Network (ATN). With the Army Training and Evaluation Program (ARTEP) no longer valid in current Army doctrine, ATN provides an easy link to Army warrior tasks and battle drills. Warrior tasks are the individual skills known to be critical to Soldier survival.²⁴ Battle drills are collective actions (or tasks) performed by a platoon or smaller element without the application of a deliberate decision-making process, initiated on a cue, accomplished with minimal leader orders, and performed to standard throughout like units in the Army.²⁵ The ATN also offers leaders resources to tailor squad- and team-level training with user-friendly access to Army universal task list, unit training modules, and links to applicable doctrine.

Mission command helps commanders capitalize on the human ability to take action to develop the situation and integrate military operations to achieve the commander's intent and desired end state.²⁶ For live-fire training, understanding mission command helps leaders take disciplined initiative when synchronizing assets. In theory, it will also delineate the platoon, company, and battalion fight. Let us look at the employment of mortars as an example. A mortar platoon leader is the combat leader and principal advisor to the battalion commander while the company/troop commander is responsible for the tactical employment of his mortar section. For a mortar section to be effective, the battalion/squadron commander must provide a clear intent and desired end state for what he wants his mortar unit's fires to do and how he wants them to support his maneuver.²⁷ To prepare for a CTC CALFEX effectively, embed mission command in home-station training.

A solid relationship between the commander and fire support officer (FSO) is critical to improving asset management. Asset management refers to the synchronization and employment of all direct and indirect fire capabilities. The higher the echelon of command, the more complex this becomes. Battalion and company FSOs are responsible for planning and coordinating the fire support plan.²⁸ This includes air-ground deconfliction of airspace, integration for aviation assets, and incorporating indirect fire. This is a large and difficult burden to bare. This is why the commander must foster this relationship and provide commander's intent. The result will be the appropriate level of guidance and optimal asset employment.

During every training event, of course, leaders use TLPs. However, subordinate-level leaders often remain stagnant as they wait for higher to issue an order. This wastes time and is counterproductive to effective planning. At home station, units must become comfortable with collaborating with, rather than waiting on, higher headquarters. This requires subordinates to begin parallel planning as higher develops the plan or order.²⁹ Additionally, during complex operations, bottom-up refinement often helps the orders process. When companies and below become comfortable with parallel planning, it will maximize the available planning time and reinforce effective plans.

Lastly, one of the most important areas to focus home-station training on is maneuver. Based on recent feedback from the JRTC live-fire division, home-station training must focus specifically on improving the breach fundamentals — suppress, obscure, secure, reduce, and assault.³⁰⁻³¹

Suppress. A sufficient supporting force is critical to suppressing the enemy. When done properly, it will employ enough direct small-arms fire to allow the breaching element to move. This may mean using 60mm mortars as part of suppressive fires. Suppression also includes tying rates of fire to high points of risk.

Obscure. Hand-emplaced smoke is the most responsive and most effective breaching obscurant.³² During training, obscuration training should focus on degrading enemy observation and fires while not impeding friendly fire and control. Leaders must also place emphasis on the science of obscuration. This includes considering how many rounds to use, artillery time of flight, and smoke dissipation time.

Secure. Secure is a tactical mission task that involves preventing a unit, facility, or geographical location from being damaged or destroyed because of enemy action.³³ For home-station training, units must practice resourcing maneuver and supporting assets sufficiently to avoid giving the enemy freedom of action. In other words, set conditions for each maneuver element to have overwhelming success. Tying rates of fire to high points of risk applies here also.

Reduce. Reduction is the creation of lanes through or over an obstacle to allow an attacking force to pass.³⁴ Home-station training should put an emphasis on determining how to create maneuver lanes that rapidly build combat power. Additionally, redundant reduction methods will improve the combined arms breach.

Assault. The culminating event for the breach is the assault. During home-station training, ensure the assaulting force does not neglect to destroy the enemy on the far side of the obstacle. Failing to do so allows the enemy to place or observe direct and indirect fires on the reduction area. Next, integrate direct and indirect fires to establish and maintain the offense. Additionally, train on the triggers that synchronize:

- Shifting fire
- Lifting fire
- Ceasing direct fire
- Ceasing indirect fire

Home-station training is the foundation to a successful CTC CALFEX. This must involve mastery of the basics. If home-station training focuses on the trends listed above, units will reach the level of training required to succeed at any level of CALFEX.

Conclusion

This article describes the JRTC battalion-level CALFEX, highlights its value for GRF and RAF training, and offers a practical framework for home-station, battalion-level live-fire training. The focus of LFXs at JRTC has been on the platoon and company levels and has now grown to battalion. There is no doubt that a brigade combat team CALFEX will soon follow. Regardless of the scale of the exercise, live-fire training is a key part of the JRTC experience.

Notes

¹ U.S. Army Forces Command (FORSCOM) Regulation 350-50-2, *Training at the Joint Readiness Training Center* (July 2000), 85.

² 09-50: JRTC Trends 1-2 Quarter FY09, 6.

³ 15-04: JRTC Decisive Action Training Environment Trends FY 2013-2014, 1.

⁴ Dave Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society* (NY: Back Bay Books), 18.

⁵ Army Regulation (AR) 350-50, *Combat Training Center Program* (April 2013), 1.

⁶ DA Pamphlet (PAM) 385-63, *Range Safety* (April 2014), 235.

⁷ Jerry Hensen, interview with author.

⁸ Ibid.

⁹ FORSCOM 350-50-2, 82.

¹⁰ Live-Fire Division Handbook and SOP (December 2014), 79.

¹¹ CPT T.J. Tepley, interview with author.

¹² FORSCOM 350-50-2, 141.

¹³ FORSCOM 350-50-2, DA PAM 385-63, AR 385-63 prerequisites.

¹⁴ CPT T.J. Tepley, interview with author.

¹⁵ Live-Fire Division Handbook and SOP, 77.

¹⁶ COL Michael Barbee, "The CTC Program: Leading the March Into the Future," *Military Review* (July-August 2013).

¹⁷ Training Circular (TC) 7-9, *Infantry Live-Fire Training*, E-1.

¹⁸ Live-Fire Division Handbook and SOP, 98.

¹⁹ Ibid, 23.

²⁰ Ibid, 25.

²¹ Ibid, 25.

²² Ibid, 29.

²³ JRTC Live-Fire Division Trends, June 2014.

²⁴ Army Warrior Tasks and Battle Drills, https://atn.army.mil/dsp_template.aspx?dpID=105.

²⁵ Ibid.

²⁶ ADRP 6-0, *Mission Command* (May 2012), sec 1-5, 1-1.

²⁷ Army Tactics, Techniques, and Procedures (ATTP) 3-21.90, *Tactical Employment of Mortars* (April 2011), 2-2.

²⁸ Ibid, 2-2.

²⁹ FM 6-0, *Commander and Staff Organization and Operations* (May 2014), 9-2.

³⁰ CPT T.J. Tepley, interview with author.

³¹ ATTP 3-6.11, *Combined Arms Operations in Urban Terrain* (June 2011), 66a.

³² Ibid, 7-15.

³³ ADRP 1-02, *Operational Terms and Military Symbols* (August 2012), 1-33.

³⁴ Army Techniques Publication (ATP) 3-21.8, *Infantry Platoon and Squad* (April 2016), H-9.

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