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Light/Heavy Integration At the Joint Readiness Training Center

by Sergeant First Class Paul E. Thompson Jr.



PHOTO: Fort Polk PAO

"I see a whole lot of Albanias in the future; a whole lot of Haitis and Mogadishus. That's because of this globalization of information, globalization of population, birth and migration, a certain amount of expectation and fascination."[1]

Yes, we still have to be ready for our Desert Storm-type scenario, but in the next decade we are expecting more Haitis, Panamas, Somalias, and Bosnias than we are problems with Saddam. It is this type of contingency mission that armor soldiers must accomplish along with the Desert Storms.

The Joint Readiness Training Center (JRTC) specializes in low- to mid-intensity conflict of the type today's armored force will encounter during many deployments. JRTC's mission is to provide an advanced level of joint training for Army, Navy, Air Force, and Marine Corps contingency forces under tough, realistic conditions of low- to mid-intensity combat. It is also the premier light infantry training center in the world. This claim is proven by the number of countries who send observers to JRTC in order to set up their own training centers replicating the battlefield realism and effective observer controller coverage demonstrated at JRTC. However, many people, Armor soldiers included, don't know that there is a heavy team attached to the light brigade task force executing a JRTC rotation. The heavy team usually consists of a balanced company/team of two M1 platoons and two Bradley platoons led by either a tank or a mechanized infantry company commander. Occasionally, there is a heavy cavalry troop with a standard mix of tanks and Bradleys, maintenance support, logistical support, and 120mm mortars.

At JRTC, rotations include a light brigade task force consisting of two light, airborne, or air assault infantry battalions, one CPX battalion, a field artillery battalion, aviation task force, one forward support battalion, and one heavy team. The OPFOR is from the 1/509th Airborne Infantry Battalion, which includes three infantry companies and a cavalry troop augmented by the 2nd Armored Cavalry Regiment.

The OPFOR is a 24-hour-a-day, 360-degree type of enemy that gives no break to the BLUEFOR once they are "in the box." They are there in the morning, during the day, in the evening, and they are there all night. They are truly a worthy foe. There are also 11 MOUT villages and cities in the "box," along with three flight landing strips. Some of the MOUT sites are fully instrumented and provide the heavy team with full-scale, realistic training in urban combat. MOUT operations includes sites fitted with MILES on the outside of buildings and equipped for both live fire and force-on-force operations. Many buildings are equipped with cameras to provide film footage to integrate into the after-action reviews.

Battlefield realism is pervasive at JRTC. Actual Soviet Bloc helicopters are used. There is a Hind-D, a Hip, a Helix, and a Hoplite. Also present are UH-1Hs replicating those found in military forces throughout the world. An actual Soviet AN-2 Colt is used to insert enemy parachutists or to resupply enemy forces. Visually modified M551 Sheridans replicate T-62 tanks, VISMODs on HMMWVs replicate BRDMs and on M113s replicating BMPs. Fire markers place all indirect fire missions for both BLUEFOR and OPFOR. They also pro-

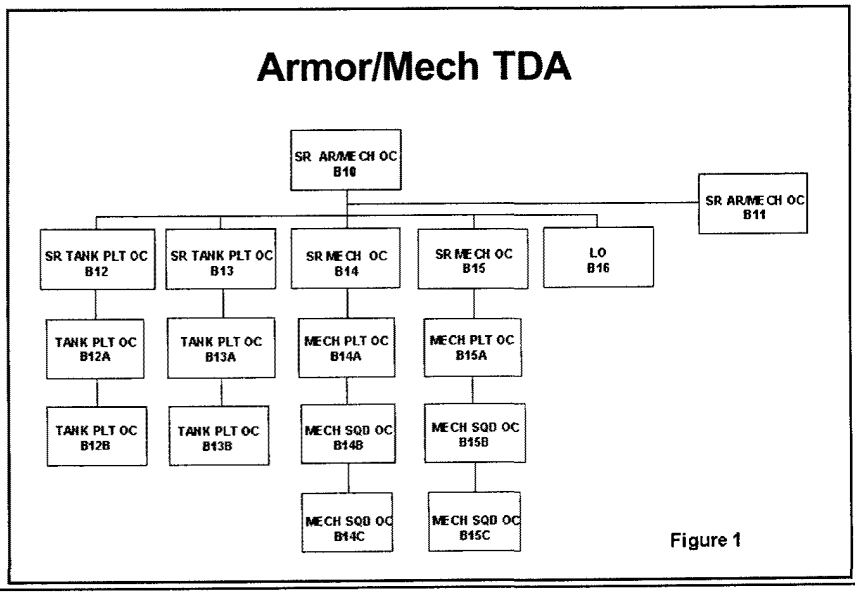


Figure 1

AQI02-05-0954

vide effects for minefields if a vehicle or soldier wanders into one. Secondary burns are set up to simulate vehicles or equipment burning. Terrorist bombs or rucksack bombs are a favorite tactic for the OPFOR. Simulated casualties must be evacuated through the CSS system, all the way to the deployed corps area support hospital if the injury requires that level of treatment. Civilians on the battlefield add their presence with village and city mayors, non-governmental organizations, host nation police, and host nation armed forces. Add battlefield clutter, civilian vehicles destroyed in minefields, and uncontrolled refugee traffic, and the result is a battlefield closely resembling the conditions the armor force will likely encounter in today's environment just about anywhere.

In order to be effective in such an environment, tanks and infantry must mesh. Unfortunately, our Army must re-learn this on a conflict-to-conflict basis. At JRTC, the armor/mech team package of observer controllers focuses on armor operations supporting light infantry operations in restrictive terrain. (A copy of the armor/mech team TDA is included in Figure 1.) It is readily apparent during rotations that tankers are not used to working with light infantry. The reverse is even more apparent, but we must learn to do so again, as we have in the past. Since the first British tanks crossed no-man's land at the Battle of the Somme in 1916, we've known that tanks without infantry support in restrictive terrain can lead to a disastrous situation. The reverse can also lead to disaster, as we found out the hard way in Somalia.

The following are some observations I offer to my fellow armor soldiers based on my tour as an observer controller:

Light/Heavy Integration Observations

Heavy force commander involvement in the planning process. A major or branch-qualified captain must accompany the company/team as a liaison officer/special staff officer to interface between the brigade commander and the company/team. The LNO and the commander are the brigade commander's "subject matter experts" on armor employment, capabilities, and limitations of the force. Many light infantry commanders and staffs possess only limited knowledge of the capabilities and limitations of armored forces. The LNO and the commander are there to answer those critical questions which are vital to a light brigade since the heavy team represents roughly a third of the brigade's combat power.

Insufficient time provided to the heavy force commander for rehearsals. As we are so often taught in the heavy community, the last of the troop-leading procedures is perhaps the most important. That is supervise, refine, and rehearse. Light infantry troops can conduct rehearsals and go. In tanks, we like to do as a minimum a walk-through, and also a mounted rehearsal, if possible, to work out any bugs. In the fluid and quick world of the light infantry, you may not have time for the mounted rehearsal. In fact, all you may have time for is a FRAGO over the radio.

Heavy teams not adapting well to restrictive terrain and the enemy dismounted threat. At Fort Polk, there are dense forests, low, marshy ground, and generally poor visibility. Not a perfect place for tanks, but we may have to deploy to a similar place in the future. Think about it. In WWII, the tankers that went before us fought in such imperfect places as Saipan, Okinawa, and the Philippines. Neither Korea nor Vietnam are ideal "tank country," either. Today's tankers are used to dealing with tanks as a threat and troops as a secondary target. How would it be to have to deal with troops as a primary target for the better part of a CTC rotation? Easy? Think again. It is not as easy as you might think, especially when the troops are laying mines, sniping at you, and basically taking every chance they can to disrupt your every routine. Local security without Bradley dismounts can be a real problem if you come here tank-pure.

An effective technique here is to hit the trees during the day so you will not be exposed to OPFOR air, dismounted observation, or the summer sun. At night, occupy an open area where it is easier to spot OPFOR dismounts with night vision devices and you have a better kill zone. Make full use of trip flares, OPs, and the TIS for early warning. The important thing is to move around and not get too comfortable in an AA where you can be targeted by OPFOR mortars or infiltration. Adjust your TIS by sending a dismount out in the woods during the day, adjusting it for brightness, contrast, and sensitivity, and marking those settings. Do the same at night and remember to place the TIS on the daylight settings for the day and the night settings at night. You can make adjustments to compensate for light levels, but just be aware there is a difference and the adjustments give you a starting point to observe enemy dismounts during day or night operations.

Teams not establishing OP/LPs. OP/LPs can earn big money for local security and early warning against a dismounted attack. This is where task organization with light infantry soldiers can be a big plus. If tankers spend all day and all night on their night vision, their performance will degrade in a few days to the point they will be just about useless. If you have infantry dismounts in an assembly area, put three men in a fighting position outside of the perimeter and put them at 33%. You can then go to 25% or 50% on the tanks and Brads, depending on the enemy situation. Use one fighting position during the day, then after dark, set up trip flares around that position and pull your OP/LPs closer to the perimeter. If your dismounts are discovered during the day, the OPFOR will have a surprise waiting for them at night. Just before daylight the next day, move back to your day hole, disarm the trip flares, and take up residence again if you are going to stay at the same place.

Deconfliction of SOPs prior to linkup. It is always nice to work off the same sheet of music. Many times armor and mech platoons deploy to JRTC never having worked together. The company team commander must determine the brigade's SOPs, (especially reports and reporting procedures) prior to linkup with the brigade and establish a common SOP for the company team. This should include reporting procedures as it seems that no two units in the U.S. Army have the same reports or reporting procedures. Of course, I am being facetious, but the statement is not so far from the truth that we can't all wryly smile at it.

Overtasking the heavy force because of its mobility. The heavy force can usually get anyplace on the battlefield in a very timely manner. Throw in a few minefields, snipers, and convoy escorts combined with a quick reaction force mission in support of a light infantry unit, and the heavy team is overwhelmed in a few days of continuous operations. The LNO and the commander must closely monitor the company/team and allocate time for rest and maintenance.

Tired soldiers can accomplish a mission, but exhausted soldiers become a menace to themselves and others. The heavy team can only handle so much.

Underestimating the amount of logistical support required to sustain the heavy force. Many light brigades have never worked with a heavy team and have little idea of the size of the logistic demands it can place on their supply system. The support platoon leader of the heavy team must provide accurate logistics estimates to the brigade. The entire light brigade will probably not use as much fuel in an entire rotation as the heavy team does in three days.

Battalion/brigade commanders and staff do not understand how to employ the heavy team in the attack or defense. Many times the heavy force is piecemealed into the attack or the defense. There are times when individual tanks are split from their platoons to do missions when OPCON to a light battalion or company. Tanks should NEVER be split down past section level. The tanks need each other for mutual support and security. Two tanks or Brads together should be the minimum slice traveling the battlefield. Mass is still critical to success; however, sometimes mass can be defined as a tank or Bradley section when facing dismounts.

Poor adjacent unit coordination. There is a real problem with adjacent unit coordination at JRTC. Light infantry units are always moving on the battlefield. We believe that there is a need for the heavy team to have a TOC for battle-tracking. They should get continuous updates from the brigade on unit movements, contacts, mine strikes, and upcoming operations. This way, when a platoon leader gets a mission, he can step into the TOC and get an updated situation from the TOC officer or NCO. This can help to reduce fratricide and continually running into minefields that have been re-seeded by the OPFOR.

LNOs not able to maintain 24-hour operations. A typical LNO team that comes to JRTC is an officer and his driver. We recommend a more robust LNO team that can execute 24-hour operations. This should include two officers (at least one field grade and one company grade), two NCOs, and one driver. An LNO from the FSB could be put to good use also, relieving the brigade LNO from chasing down parts and fuel. This is the minimum package needed for continuous operations. At least one M113 and one HMMWV should be included in the package. A good LNO team can iron out many details before they become problems. They participate in wargaming and targeting meetings. They can also assign the correct task and purpose by translating "Infantryese" into an armor mission. It is also helpful to have a field grade officer from the home battalion around to visit the crewman in the field.



Company Team Missions/Operations

- RESERVE/OFFENSE/DEFENSE:
  - COUNTERATTACK BY FIRE
  - BLOCK A PENETRATION
  - REINFORCE A DEFENDING FORCE
- OFFENSE
  - ADVANCE GUARD
  - HASTY/DELIBERATE ATTACK
- DEFENSE
  - -DEFEND A PERIMETER
  - -DEFEND IN SECTOR
- OTHER OPERATIONS
  - -SCREEN
  - -OPEN AND SECURE ROUTES
  - -CONDUCT CONVOY ESCORT
  - -ESTABLISH CHECKPOINTS
  - -DELIBERATE/HASTRIDE BREACH

Figure 2 FM 71-1 DRAG

Fratricide, inflicting and receiving. As tankers, we are used to engaging targets at long range and having some sort of a sense of lines on a battlefield. At JRTC, you cannot take this for granted. Correct target ID is important for vehicles and for dismounts. Armor forces have inflicted fratricide and been on the receiving end. Situational awareness and adjacent unit coordination are two main causes, but poor target ID is also a factor.

Inability to coordinate direct fires within a MOUT environment. On many occasions when M1s and Bradleys enter a MOUT environment they have an "unleash the hounds" mentality. This "shoot anything that moves" mindset may have been OK in the past, but many groups take a dim view of it today. Soldiers need to get used to working with tactical rules of engagement and, on the JRTC battlefield, they will be held accountable for willful collateral damage. There are civilians, churches, and schools in the MOUT environments here, and soldiers have to be careful with the shots they take and the type of ammunition that they use. As tankers, we are not used to treading lightly, but in a case involving innocent civilians we must tread a bit lighter in this environment. Fire discipline is critical. If you train at a training center to level a city, chances are you will do it in an actual situation.

Inability to execute combined arms breaching in restrictive terrain. Combined arms breaching is one of the critical tasks that will make or break a company/team. Using the mineroller to detect the leading edge of a minefield, the roller tank strikes or sights a possible minefield. He then backs off and provides overwatch with the rest of his section. The infantry goes out to the flanks under cover and the engineers go forward to breach. SOSR is that very important but little practiced set of breach fundamentals that stands for suppress, obscure, secure, and reduce the obstacle minefield. We are responsible for the first three in combined arms breaching, and the engineers take care of the last one. Unfortunately, at JRTC a lot of engineers are "killed" because we do not execute the first three properly.

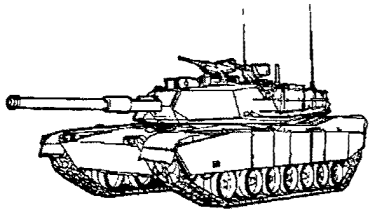
In the last 81 years, warriors in the armor and cavalry field have derived many good ideas. Unfortunately, as the lessons from Panama, Desert Storm, and Somalia get farther away in time many of the lessons from them fade into the history of the totally forgotten lessons from earlier wars. These are the very same lessons we continually learn and re-learn at the CTCs as shown below:

- When a minefield is cleared there is a good chance that there has been, or is, enemy activity in the area, and a better than even chance that the minefield will be re-seeded. After you've searched the area for mine caches, consider an ambush position around the old minefield to prevent the reseeding. Remote sensors can tell you if there is someone up to old tricks. If allowed by the rules of engagement, targeting the area with artillery or mortars might bag you a couple of bad guys.

- When traveling tank-pure in restrictive terrain, it is a good idea for wingmen to occasionally check each other out for enemy dismounts who try to at-

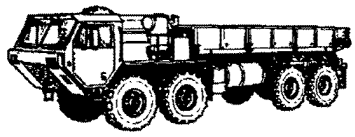
Proposed Unit Equipment Density

COMBAT VEHICLES:
M1A1: 10 each
M2A2: 8 each



SUPPORT VEHICLES:
M113A2 (ENG) 4 each
M2 BSFV: 2 each
MICLIC: 2 each
FISTV
CME: 2-Rollers/2-Plows

LOGISTICS VEHICLES:
M88A2 Recovery Vehicle: 2 each
M113A2 (MAINT): 2 each
M977 (Cargo): 4 each
M978 (Fueler): 4 each
HEMTT Wrecker: 1 each
M925A2 (5 ton) (DS)
M925A2 (5 ton) (Supply,
Tool, PLL, Mess, (EN) 6 each
M113A2 (Medic): 2 each



Proposed Unit Personnel Density

Heavy Team		
Company HQ	15	15
Mechanized Infantry Plt (x2)	64	64
Armor Platoon (x2)	32	32
Company FIST	0	8
Transportation Sec (-)	0	5
Tank Co III/V Squad	0	10
Food Service Section (-)	0	5
Maintenance Supply Section (-)	0	1
Recovery Section (-)	0	3
Maintenance/Service Section	0	6
Ambulance Squad	0	4
BFV Co Maintenance Tm	0	6
Tank Co Maintenance Tm (-)	0	6
FSB (DS) Maintenance Slice	0	10
FSB Transportation Support	0	12
ADA Section	0	13
MAX: 3xBSFV w/PL and 2 Stinger Tms		
LNO to Brigade TOC w/driver	0	6
LNO to BSA w/driver	0	6
Engineer Plt w/Equipment Sec	0	46
MAX: 2xACE; 2xAVLMs; 1xVOLCANO		
Heavy Team Total	**111**	**258**

Figure 3

tach themselves to the back decks and turrets in an attempt to destroy the tank with satchel charges or Molotov cocktails.

Your wingman will understand if you let him know over the radio that you are going to "scratch his back" with your coax.

This will take care of those pesky "growths," and your wingman will be no worse for the wear.

- Keep plenty of fragmentation grenades in your basic load for local protection. Tanks in Vietnam used this technique very effectively. Another similar technique was strapping Claymore mines to the outside armor of the tank with the clackers marked as to position inside the driver's compartment.

- Canister ammunition was very effective in all theaters of WWII, Korea, and Vietnam. With the amount of missions that have taken place in Third World countries in the last few years and the significant amount of dismount threat associated with them, it is good to hear there is a 120mm canister round in the works. HE also has a serious antipersonnel effect but it is nowhere near as effective as canister. Until the introduction of the new round, the Bradley 25 MM HEI-T is also very effective, with a killing burst radius of five meters.

- In Vietnam, we modified the M113, eventually giving birth to the Armored Cavalry Vehicle (ACAV). At first it came out with a .50 cal. machine gun. Later an armored shroud was added around the .50 cal. Later, two M60 7.62 MGs with armor plating on the mount were added as wing guns. A variation of the ACAV was used by the Vietnamese, and turned out to be very useful. Between 11 June and 30 September, 1962, which was soon after the Vietnamese fielded the M113, the original two companies killed 502 Viet Cong and took 184 prisoners at a cost to themselves of 4 dead and 9 wounded.[2]. With the loss of the Sheridan, there are rumblings across the armor community that the ACAV may be resurrected for use in the 82nd Airborne Division. Currently, M113s are equipped without armor shielding around the .50 cal. We learned it once. We should not have to learn it again.

- At Tarawa Atoll during WWII, only two out of six M4A2 tanks landed actually picked their way across a coral reef to shore.[3] Those two tanks played a major part in turning the tide of the battle on the western tip of the island. If armor vehicles will help save lives in any situation, then we should not hesitate to use them when we have to deploy our troops.

- When tanks were used during Vietnam as relief platoons (known currently as a quick reaction force (QRF)), the QRF force was used to relieve units under attack or who had been ambushed. It was a common practice for the relief platoons themselves to be ambushed by

"Tankers, get ready for light/heavy integration, because it is not only coming, it is here."

the Viet Cong. Plan on it, because someone in the future will find the guts to try it. Air/ground coordination is useful in this situation, and many others, to scout the route and warn the QRF of any surprises. Air/ground coordination can be used for many situations in light/heavy integration. Most cavalry units we have seen are very good at it, and it is not a bad idea for all units.

- Fascines are devices that have been used to cross ditches since the time of the Roman legions. Most recently, they were employed in Operation Desert Storm by the British. They used huge bundles of PVC piping to fill in ditches for armored vehicles to cross. No, we currently have no way to move fascines, but if there are trees around you have the ability to build one by cutting them down and throwing them into the ditch until it is filled enough to cross. I have seen it used only once at JRTC, and the idea came from a corporal. Yes sir, NCOs can think also! (By the way, for the ecologically minded, the unit used already dead logs and limbs to fill in the ditch and did not cut down any live trees. It is against the EXROE to cut or knock down trees bigger than three inches.)

- When in a static position use chain link fence around an area to protect vehicles from RPG rounds. These RPG screens will pre-detonate the rounds before they reach the vehicle. There is still the danger of fragmentation, so other appropriate measures are also in order

- Use sandbags on top of vehicles to protect from top-attack weapons and attack air. Also use it in the floors and cab roofs of lightly skinned vehicles for mine protection and additional ballistic protection.

- In a fight against dismounted forces, one tank with an infantry platoon can be considered mass. However, splitting the armor below section level should be resisted at all costs. The armor platoon is designed to fight as a platoon. Section level should be the lowest level that tanks are employed. In Vietnam, it was not uncommon to have an armor company headquarters in one place with one platoon undergoing maintenance services. The other two platoons could be 50-100 miles away, supporting operations with the infantry or providing strongpoint defense on bridges or other such critical locations. In this situation, the headquarters supply sergeant always had slings prepared with a platoon basic load so that they could be quickly resupplied by air if they came into contact and depleted their basic load. Regular supplies had to either be sent from that base camp or begged from the infantry.

- In Vietnam the air cavalry units found the enemy, dismounted troops to fix the enemy, and then the armor was called in to finish them. Sounds like a good way to conduct search and attack.

- When going into an area with a heavy dismounted threat, load up on MG ammunition. If you have to go into the trees, machine guns can be useful for reconnaissance by fire, not to mention the snipers you may end up taking out. This should only be used if there is a known threat in the area, but it is better to waste ammunition than one of your men's lives.

- In Vietnam, armor and mech forces would circle the wagons at night and dig in to prepare for enemy attacks. By this time, in 1968, the enemy had learned to bypass armor forces. American forces countered this enemy tactic by blanketing an area with four-man ambush patrols. Since M113s had patrol routes they had to cover every night anyway, the ambush patrols were loaded on the M113s and, immediately after dark, would drop off the ambush patrols without stopping. This made it very difficult for the enemy to pinpoint ambush positions because the vehicles never stopped moving during their reconnaissance. If one of the patrols bit off a little too much for them to chew, the ACAVs and tanks could get there quickly as a reaction force. It made the enemy think twice about their infiltration and minelaying efforts.

- In the past, all soldiers learned to be infantrymen in basic training, and then went on to AIT to learn their individual job. Then in PNCOC or PLC, infantry skills were again stressed so that small unit leaders could hold their own if they had to pick up that rifle and use it. Today, basic training and PLDC do not teach enough of those skills. We need more of an emphasis on those basic skills. As evidenced in Bosnia and Macedonia, tankers may not always have their armored beasts around them. They need to be able to succeed on foot also. Yes, we have had tankers on foot patrols and in HMMWVs running around Bosnia. These are but a few lessons learned. There are plenty of old tankers and cavalrymen out there that could undoubtedly teach us more. If you have any comments, please forward them to:

Operations Group-Bde C2
Attn: Armor/Mech Team
7154 Alabama Ave.
Fort Polk, LA 71459-5313

E-mail at chevaljh@polk-emh2.army.mil

Light/heavy integration has been around for a long time, although not always called such. There is a light/heavy handbook coming out as a pocket help for commanders to do planning. Perhaps an FM may be in the offing to help us permanently establish doctrine that will carry us into the missions we will face in the next 10 years or so. Tankers, get ready for light/heavy integration, because it is not only coming, it is here. "No tank is to be surrendered or abandoned to the enemy. If you are left alone in the midst of the enemy, keep shooting. If your gun is disabled, use your pistols and squash the enemy with your tracks... in any case, remember that you are the first American tanks. You must establish the fact that American tanks do not surrender...." orders to the first American tankers from then Major George Patton as quoted in *Tank Aces,* by Ralph Zumbro (an old tanker whom I admire). With a combination of American tankers and American light infantrymen, you will have an unbeatable team.

A proposed unit equipment density is in Figure 2. In Figures 3, there is a list of possible company/team missions that may be encountered during a JRTC rotation.

Notes

[1]GEN John J. Sheehan,USMC.

[2]CMH Pub 90-17 Vietnam Studies: Mounted Combat in Vietnam, 1978.

[3]*Tank Aces,* Ralph Zumbro, January, 1997.

SFC Paul E. Thompson Jr. enlisted in the Army in 1976 as an Indirect Fire Infantryman. His assignments include 2-325 AIR, 82nd Airborne Division; 4-333 FA, 428th FA Brigade; 2-64 Armor, 3rd Infantry Division; Cincinnati Recruiting Battalion, Recruiting Command; and 4-67 Armor, 1st Armored Division. He is currently assigned as an Armor Platoon Observer Controller at the Joint Readiness Training Center at Fort Polk, Louisiana.