

BATTLE ANALYSIS

Assessing Armor Operations in the Battle of Hue: Readyng Armor for Future Urban Operations

by LTC (Retired) Lee Kichen
Part 2 of 2

While the Communist forces would suffer a tactical defeat in Hue, it proved to be a strategic victory for them. Americans would for the first time see on the nightly news a determined enemy killing and wounding their sons, brothers and fathers on an urban battlefield. The Communists, by holding the city for almost a month, struck a fatal blow against the American strategic center of gravity: the will of the public to continue to fight an increasingly bloody and futile war in which the enemy could attack urban enclaves throughout the country.¹

The response of the American and

South Vietnamese forces to the Communist capture of Hue was a hasty attack against an enemy that prepared a detailed plan for the deliberate defense of the city. During the earlier stages of the operation, U.S. and Republic of Vietnam (RVN) commanders were unable to forge a common operating picture. Allied commanders, rather than responding immediately and decisively with overwhelming firepower, only slowly increased their combat power in and around the city, which allowed the still numerically superior and entrenched enemy to further fortify their positions. Marine Corps leaders haphazardly fed infantry into the battle without the benefit of armor.

The failure of the Army of the Republic of Vietnam (ARVN) to sufficiently garrison the city encouraged the enemy to seize Hue.² The Communists, by entering the city first, gained “home field” advantage. They knew the terrain and quickly emplaced obstacles, built fighting positions and fortified buildings. The Marine Corps’ failure to immediately isolate the city allowed the enemy to retain the initiative and continued to flow more troops and supplies into the city, while simultaneously slowing logistic support to the Marines and ARVN in the city. Had armor and cavalry augmented the blocking force, it may have earlier stemmed the flow of enemy soldiers into the city.



Figure 1. Marines clear buildings in New City with tank support.

Junior Marines reacted quickly and decisively in the first 72 hours of the fight. They displayed uncanny flexibility by transitioning from fighting in a vegetative jungle to fighting in a concrete jungle. Disciplined, well-trained and competently led Marine infantrymen and tankers, often beyond the reach of their commanders, retained a degree of combat effectiveness long enough to learn and generate effective tactics, techniques and procedures.

Hue demonstrated that the nature of a city fight demands rapid decision-making at the lowest level. There are two unambiguous lessons from the Battle of Hue: The Marines' impulsive "ride to the sound of the guns" attack into a city against a vaguely understood enemy was unnecessarily costly and that armor is key to success in urban operations (UO).

Assessing Armor operations in Battle of Hue City

Movement, maneuver and fires: Armor's physical and psychological effect was vital in the Allied victory in Hue. Although designed to fight other armored vehicles at long ranges, the M48A3 and M50 mounted recoilless rifles possessed a degree of precision fire that artillery and close-air-support (CAS) lacked. With stringent rules of engagement and weather limiting CAS and artillery fires, tanks and the Ontos were the only long-range weapons

capable of suppressing enemy infantry, neutralizing strongpoints and covering engineers.

Despite Armor's impressive firepower and ability to protect infantry, the narrow streets and confusing street plans in The Citadel compromised the tankers' ability to maneuver, mass fires and engage some critical targets. Operating in the close confines of The Citadel, maneuvering was nearly impossible. Thus M48A3s and M50s were only capable of conducting frontal attacks.

The compartmentalization and canalization of The Citadel battlespace provided the enemy multiple avenues of approach for ambushes with rocket-propelled grenades and B40 rockets. Infantry, by closely "hugging" tanks and moving between the tanks and the buildings, gained a degree of protection while suppressing enemy ambushes. Conversely, the dismounted Marines provided the tanks security from enemy anti-tank fire.

Armor in the New City with wider streets and greater spacing between buildings was able to quickly shape the battlefield. The Marines exploited the wider streets in New City by placing tanks in blocking positions at intersections; with the main and coaxial machineguns covering one street and the commander's .50-caliber machinegun covering another, they could impede enemy movement and provide fire covering infantry movement.³

The weight and dimensions of the

M48A3 – 52 tons, 24.5 feet long, 12 feet wide, 12 feet high (including the commander's cupola) and the main gun that extended nearly 10 feet beyond the tank's front slope – was less than ideal for urban combat. The two bridges spanning the Perfume River were unable to support the M48A3; consequently the tempo of the fight in The Citadel slowed until the utility landing craft (LCUs) ferried tanks to the north bank. The Citadel's narrow streets and alleys limited the range, in degrees, the turret could traverse the gun main; the main gun's maximum elevation at +19 degrees and its maximum depression of -9 degrees created considerable dead space for the crew and infantry operating close to a tank.

The lighter and smaller Ontos possessed greater mobility in The Citadel's narrow streets and alleys but lacked the survivability of the M48A3.⁴ Because the Ontos was vulnerable to rifle-propelled grenades and B40 rockets, LTC Ernest Cheatham Jr. kept them, as often as possible, in a hull-down position. In addition to the recoilless rifles mounted on the tracked Ontos, each infantry battalion had eight 106mm recoilless rifles in its heavy-weapons company mounted on small, wheeled flatbed vehicles (the M274 "Mechanical Mule"). The tank platoon commander in 1st Battalion, 5th Marines, controlled that battalion's M274s.⁵

Sustainment: At the beginning of the operation, there was no discernable logistics plan. Helicopters conducted much of the resupply activities early in the operation until truck convoys began operating on Highway 1 from Phu Bai to Hue. U.S. Navy LCUs and LCM-8s, and South Vietnamese Navy motorized junks on the Perfume River, were the principal transportation modes from DaNang until Highway 1 reopened.

Trucks carried diesel in 55-gallon drums during the first week of the battle. Refueling tanks from 55-gallon drums was an inordinately time-consuming process keeping, at any time, several tanks out of the battle. Diesel consumption was comparatively low because of relatively little movement by the tanks during battle. Diesel resupply ceased to be a concern after the



Figure 2. A tank supports 1st Battalion, 5th Marines, in The Citadel.

Navy brought in a 10,000-gallon fuel bladder.⁶

Large-caliber ammunition resupply throughout the operation was a problem. The expenditure of 90mm tank rounds and 106mm recoilless rounds was nearly 10 times above normal rates. M48A3s shot a total of 4,284 main-gun rounds, with the Ontos crews firing 4,104 rounds. The tanks switching among high-explosive rounds further strained Class V resupply on the already tenuous lines of communications. Consumption for the two gun tanks and two flame tanks in a provisional platoon was 1,154 main gun rounds of all types, 15,000 .50-caliber rounds and 155,000 7.62mm rounds. The flame tanks shot 60 seconds of napalm.⁷

The tanks and Ontos, lacking night-vision fire-control systems, returned to the ARVN compound after dark where they rearmed, refueled and received maintenance. While battle-damaged tanks were quickly repaired, the crews paid a heavy price. Only 11 of the 55 tankers who entered the city remained in Hue after the battle's conclusion. Infantrymen who later replaced the wounded and killed tankers received some simple driver training and instruction in the vehicle's weapons systems.⁸ With all engagements at 300 yards or less, rudimentary training on the tank's main gun and the Ontos' recoilless rifle was sufficient.

Intelligence: The intelligence breakdowns at the strategic and the operational level are well-documented. The intelligence failures at the tactical level were no less glaring. The lack of planning was conspicuous evidence of Allied arrogance; by omission or commission, there was no intelligence preparation of the battlefield (IPB).

The Task Force X-Ray commander was quick to blame his higher echelon for intelligence failures. Without conducting his own IPB, his Marines were without information regarding building types; construction material; design and dimensions of the structures; natural and manmade obstacles; and their influence on his scheme of maneuver. The attack – with little or no sense of the enemy's size, capability, intentions or disposition – and an insufficient

force led to the failure of the Marines' initial attack. The lack of IPB at Hue underscores that importance in future UOs of cavalry scouts performing reconnaissance.

Protection: Engineer support with its mobility, countermobility and survivability capabilities are essential for the protection of the force in an UO. However, only two engineer companies (-) were committed to the operation; Company A (-), 326th Engineer Battalion, supported 1st Brigade, 101st Airborne Division (Airmobile), and Company A (-) (Reinforced) supported the 1st Marines. The Marine engineers repaired a bridge between Phu Bai and Hue on Highway 1 and a floating bridge over the Perfume River. Had engineer assets capable of clearing the rubble-strewn streets been available, the mounted and dismounted Marines could have rapidly shaped the battlefield to their advantage.

Task-organization: The friendly task-organization reflected the ambiguous nature of the operation and inadequate pre-operation planning. As forces trickled into the fight, fragmentary orders often modified the force's task-organization. The 1st Marine Regiment ultimately gained the 1st Battalion, 1st Marines; 1st Battalion, 5th Marines; and 2nd Battalion, 5th Marines; however, none were combined-arms formations.

The infantry battalions and companies remained pure; tank, anti-tank, artillery, engineer and transportation assets remained under the control of the regimental headquarters.⁹

Readying Armor for future urban operations

Doctrine: After more than two decades of combat and decisive-action operations combat-training-center rotations, the Army possesses a wealth of real-world experience to shape and revise UO doctrine. Future doctrine must reflect the lessons-learned at Hue. United States and RVN failures, were in part, attributable to a lack of reconnaissance and security (R&S).

Current R&S-operations doctrine pays scant attention to UO. Developing urban doctrine for R&S formations should begin with 1) explicitly indicating the tactical tasks in an urban environment an R&S formation can execute; and 2) which type of R&S tasks each echelon has the ability of conducting.¹⁰ Training Circular (TC) 90-5, **Training for Reconnaissance Troop in Urban Operations**, February 2010, although somewhat dated, can serve as foundation for updating R&S doctrine in an urban environment.

Training, education and leader development: Urban combat before and



Figure 3. Citizens and American tanks in the streets of Hue. (Photo from the personal collection of COL (Retired) Ben Knisley)

after Hue underscores the value and effectiveness of the armor/infantry team. However, current UO training is infantry-centric, focusing on the street-to-street and block-to-block fighting, “door kicking,” breaching buildings and clearing rooms while ignoring the important lesson of Hue that infantry and armor combined operations are a necessity.

TC 3-20.15, *Tank Platoon Collective Task Publication*, July 2013, and TC 3-21.8, *Rifle and Mechanized Infantry Platoons Task Publication*, August 2013, contain only one and two UO unit tasks, respectively. TC 3-90.5, *Combined Arms Battalion Collective Task Publication*, has only one UO unit task. There are no urban-specific tasks on the current mission-essential task lists for the armor brigade combat team (ABCT), combined-arms battalion, armor company, cavalry squadron and cavalry troop.¹¹ Effective urban-focused collective and individual training requires a comprehensive set of UO-related unit tasks, embedded in revised training publications.

There is a dearth of urban-specific instruction in the Army’s professional military education and functional courses. The Command and General Staff Officer Course’s (CGSOC) Advanced-Operations Course includes battle analyses of Hue and Fallujah; however, each is only two hours long. It is essential that the CGSOC include in its division-offensive and defensive-operations modules instruction on planning and executing UO for battalion and higher commanders and staffs. Urban instruction in the Maneuver Captain’s Career Course (MCCC) is in the Stryker brigade combat team offensive-operations module, and for Reserve Component captains, it is in the maneuver technical module.¹²

The Maneuver Center of Excellence’s current functional courses such as the Scout Leader’s Course, Cavalry Leader’s Course and the Master Gunner Course are models for developing a suite of UO functional courses. An “Urban Combat Leader’s Course” (UCLC) could have two tracks – one for lieutenants who have completed the Armor or Infantry Officer Basic Leader Course, and another for graduates of MCCC.

Noncommissioned officers (NCOs) attend UCLC after completing the Maneuver Senior Leader Course.

The Armor School’s Abrams, Bradley and Stryker master-gunner courses have been unqualified successes. The primary mission of master gunners is to provide expertise in the preparation for gunnery training. The implementation of a Master Urban Trainer and Planner Course would produce NCOs who would advise and assist commanders at all levels with the planning, development and execution of UO training.

Training facilities: Existing venues for UO training are not large enough to support large formations equipped with tanks; the Army must establish an urban combat training center (UCTC) large enough to train and evaluate a complete ABCT. However, austere appropriations for the Army mean a large-scale facility for heavy formations is unachievable in the foreseeable future. Rather than establishing a national UCTC, local or regional UCTCs are within the realm of the possible. These facilities must be capable of supporting combined arms, Stryker and light-infantry battalions. The Zussman Village Military Operations in Urban Terrain (MOUT) Training Center at Fort Knox, KY, can serve as model for future battalion-size UCTCs.

The unfortunate, recent urban disturbances provided the active-Army and Army National Guard formations deployed in support of local and law enforcement agencies with invaluable training in UO. Failure to capitalize on the lessons-learned during these operations would be tragic. The Army would benefit by authorizing commanders to engage in some form of mutual training with neighboring law-enforcement agencies. The Zussman MOUT center has been a venue for combined-arms/joint and civilian law-enforcement training.

Organization: The existing Armor, Stryker and infantry brigade combat teams (BCTs) are general-purpose formations not organized specifically for UO. In a fiscally constrained environment, the Army lacks resources to add a new brigade-sized formation to the force. However, the Army has a track

record of using existing units as laboratories for testing and evaluating new formations. For example, the Army converted 9th Infantry Division in 1983 to a high-technology test bed to develop a motorized division designed to fill the gap between heavy and light divisions. Also, in 1997 the 4th Infantry Division (Mechanized) became the Force XXI Experimental Force in which the Army studied the ways and means of converting the remnants of a forward-deployed Cold War Army to a force-projection Army for the 21st Century.

The Army can take a BCT offline and convert it to an experimental formation to design an urban BCT (UBCT) capable of operating independently as a part of division- or corps-sized formation. The experimental UBCT’s initial configuration could include three battalions: 1) a mechanized-infantry combined-arms battalion built around two mechanized-infantry companies and one tank company; 2) a Stryker infantry battalion with a Mobile Gun System platoon; and 3) a light-infantry battalion with two infantry companies and a light tank company equipped with the mobile protected firepower (MPF) vehicle now in its test and development phase. The UBCT operating in a megacity must be capable of simultaneously conducting offensive, defensive and stability operations.

This force design will require only minimal changes to the structure of the current BCT’s Cavalry squadron or the field-artillery and brigade-support battalions. However, UOs have historically required significant engineering support; Armor formations in future UOs must have a robust wet and dry gap-crossing capability. When the UBCT reaches objective-force status, the Army can transform three active and three National Guard BCTs to UBCTs. The active BCTs will have either a European or Indo-Pacific regional focus. Each National Guard UBCT will partner with an active UBCT to leverage resources to enhance and improve command and staff processes; collective and individual training; and leader development for both organizations.

Materiel: The Army’s emerging MPF system answers the need for a light tank capable of supporting light-infantry formations. The Army canceled the

M8 Armored Gun System, the M551 Sheridan's proposed successor in 1997. It would be a disservice to light-infantry formations if history repeats itself and the Army cancels the current MPF project.

The first formations to deploy during a future contingency operation will be light infantry, requiring a light tank that is air transportable in enough numbers – deployable from over-the-horizon vessels landing craft is a necessity. The Army's continuous modernization of the Abrams fleet and, hopefully, the fielding of the MPF presents Armor with an opportunity to network with semi-autonomous or autonomous drones and other robotic systems. During an UO, unmanned systems can conduct resupply operations; identify and target non-line-of-sight threats; and perform mobility and counter-mobility tasks.

Conclusion

George Santayana's maxim that "those who do not learn from history are doomed to repeat it" applies to how mounted formations will fight in a future large-scale urban operation. The lessons of Hue and other UO are invaluable to today's tanker, scouts and infantrymen. These lessons must be the catalysts for modernizing the mounted force's doctrine, structure, training, equipment, facilities and leader development for fighting in cities. Modernizing how the Army conducts UO cannot be incremental; by nibbling on the edges of the status quo, the magnitude of the threat dictates that this transformation must be total and accomplished without delay.

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and a master's of arts degree in counseling psychology from Chapman College. His awards and honors include the Legion of Merit (one oak-leaf cluster) and Meritorious Service Medal (two oak-leaf clusters).

Notes

¹ Headquarters U.S. Marine Corps, *Military Operations on Urbanized Terrain (MOUT)*, Washington, DC, 1998.

² Combat after-action report, Task Force X-Ray.

³ Alec Wahlman, *Storming the City: U.S. Military Performance in Urban Warfare from World War II to Vietnam*, Dennison, TX: University of Texas Press, 2015.

⁴ Kendall D. Gott, *Breaking the Mold: Tanks in the City*, Combat Studies Institute Press, 2020. For the purpose of this article, "armor" includes Marine Corps M-48A3 tanks; the M-50 Ontos 106mm recoilless-rifle track-mounted system; M-42 "Dusters" from Battery D, 1st Battalion, 44th Artillery, carrying twin rapid-firing 40mm guns; M-67A2 flame tanks; and ARVN M-41 Bulldog light tanks.

⁵ Wahlman.

⁶ COL S.S. Hughes, commanding, Headquarters, 1st Marines (-), 20 Marines, combat AAR, March 20, 1968.

⁷ Hughes and retired USMC LTC Ray Stewart, *Marine Corps Tanks and Ontos in the Vietnam War*, Federal Way, WA: Marine Corps Vietnam Tankers Historical Foundation, 2019. Note: Napalm consumption would have been significantly higher had the flame tanks been equipped with complete firing mechanisms.

⁸ Wahlman.

⁹ Hughes.

¹⁰ CPT Kyle D. Woods, "Recon and Security in the Urban Fight," *ARMOR*, Fall 2020 edition.

¹¹ U.S. Army Armor School, *Armor Fiscal Year (FY) 2021 Training and Leader Development Strategy*, Fort Benning, GA, 2020.

¹² MCCC Map, FY 21 and MCCC map-RC.

ACRONYM QUICK-SCAN

ABCT – armored brigade combat team

ARVN – Army of the Republic of (South) Vietnam

BCT – brigade combat team

CAS – close air support

CGSOC – Command and General Staff Officer Course

IPB – intelligence preparation of the battlefield

LCU – landing craft, utility

MCCC – Maneuver Captain's Career Course

MPF – mobile protected firepower

MOUT – military operations in urban terrain

NCO – noncommissioned officer

R&S – reconnaissance and security

RVN – Republic of (South) Vietnam

TC – training circular

UBCT – urban brigade combat team

UCLC – Urban Combat Leader's Course

UCTC – urban combat training center

UO – urban operations



Figure 4. Hue in ruins, 1968. (Photo courtesy Center of Military History)