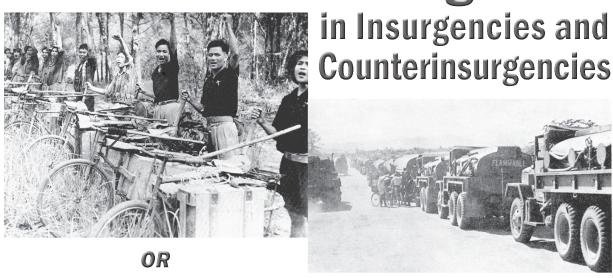
COM Writing Competition

# The Paradox of Logistics



"Why a 'little bit' goes a long way and a 'whole lot' is never 'enough'..."

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RMIES THAT WAGE WAR against insurgencies are often confounded by a logistic paradox that poses an important question: Why does a "little bit" of logistics seem to go a long way for the insurgents, while a "whole lot" of logistic support never seems to be enough for counterinsurgency efforts? What is going on here? Why is it that insurgents are able to achieve tactical and even political results that seem out of proportion to the logistics that produced them? Conversely, why is it that massive logistic support is needed to conduct counterinsurgency warfare? Why is it that the substantial logistic effort that counterinsurgency warfare requires continues to be dismissively underappreciated? And even when significant logistic resources are allocated for counterinsurgency warfare, why does much of it appear to be "wasted"? Traditionally, insurgency and counterinsurgency warfare has been examined from ideological or tactical perspectives, with less attention paid to how this type of warfare is materially sustained. As the United States, once again, faces the dilemmas posed by this type of conflict, it might be useful to reexamine our understanding of the role of logistics by juxtaposing insurgent and counterinsurgent practices.<sup>1</sup>

While insurgent or guerrilla warfare has a long history going back to ancient times, World War II seems to be an appropriate modern starting point for the purposes of this study. In the aftermath of this war, there was an explosive proliferation of the weapons and vast quantities of materiel mass-produced for that conflict and the cold war that followed. The ensuing unprecedented dispersion of these substantially improved lethal capabilities put a new spin on logistic practices in guerrilla and insurgency warfare.

From a logistic perspective, potential insurgents now had "more equal" access to significant quantities of industrially produced material that previously

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PHOTOS: (left) Vietcong bicycle porters preparing to move out on the Ho Chi Minh trail. (right) An American POL convoy awaiting movement in Pleiku, South Vietnam. (DOD)

had been accessible only to agents of the state. By coupling more sophisticated materiel with traditional asymmetric tactics, insurgents were able to reduce the disparity between their capabilities and those of the state-sustained militaries and other authorities they were fighting. This effect was most visible in formerly colonial corners of the world, where the Second World War left ill-resolved questions of self-determination and polity. In the aftermath of the cold war, as after the Second World War, residual stockpiles of exceptionally destructive war materiel produced by modern industry continue, ironically, to provide even the most anti-modernist insurgents with a capability that they alone cannot generate for their own use.

The last time the American Army was compelled to seriously assess the logistical practices of its erstwhile enemy and itself in an insurgent and counterinsurgent environment was during the Vietnam War. For this reason, much of this article draws upon the experiences of that war, which logistically was fuelled as much by the cold-war-inspired synergistic dynamism of the military-industrial complex as by ideologies and logistic doctrines (both insurgent and conventional) forged in the larger conflict of World War II.



Vietcong remanufacturing satchel charges and other explosives by cannibalizing captured allied artillery shells.

## The Resurrection of Insurgency Logistics Doctrine

While World War II saw plenty of conventional large-force invasions, it also provided a lot of incentives and opportunities for aggrieved locals to resist under a variety of nationalist and ideological banners. One particular resister showed that he had an especially keen grasp, logistically, of what he was up against and, more significantly, how modern

materiel could be leveraged in new ways to the insurgents' advantage:

It must first be noted that the ... aggressor is a strong ... power whose invasion...is based upon a relatively advanced stage of industrial production and of armynavy-air techniques. However despite the higher level of the enemy's industry, he remains [a]...power deficiently gifted by nature. He has not himself been able to mass enough human, financial and material power to last out a prolonged war and to cope with an immense theater of war. In addition to this, anti-war sentiment is developing amongst the [enemy's] people which is affecting the morale of the lower officers and the broad rank and file of her army. Besides, [the enemy's] opponent is not limited to [us] alone, hence she cannot devote her entire force of men and material to an invasion of our country. . . . she has to reserve her forces to deal with other powers. On account of these reasons [the enemy's] war of aggression is definitely disfavored by a prolonged war and by the extensive occupation of territory. Strategically [the enemy] is forced to demand a war of quick decision. It would be difficult for her to continue if we could persist for more than three years.

This quotation, penned by Mao Tse Tung in 1939, has a presciently contemporary quality.<sup>2</sup> Although Mao wrote it in the context of the Chinese struggle against the Japanese occupation, it could easily be adopted by many of the asymmetric challengers facing the United States today.<sup>3</sup>

From a logistic perspective, the notable point is that this document is an insurgent's avowed recognition of his inferior position with regard to access to modern materiel. Furthermore, it implies that other methods of sustainment would have to be found. From Mao's perspective, his guerrillas needed methods that were both *sustainable* and *suitable* for a long war—a war that would outlast the resources, capabilities, and will to fight of a modern industrial enemy state with a theoretically unlimited means of production, particularly when compared to the seemingly paltry potential capabilities of the insurgents.

Mao left it to one of his lieutenants to articulate more specifically just what these other methods were to be. In a section of *On Guerrilla Warfare* detailing the "Most Important Factors in the Guerrilla War of Resistance," Chu Teh noted that right after "No. 1. Political Warfare" (understandably a point of primacy for ideologically driven communists) came "No. 2. Economic Warfare," "No. 3. Warfare in Human Material," "No. 4. The War

of Armaments," and finally, "No. 5. The War of Transportation and Communications."

Sections two, four, and five get at the heart of insurgent logistics issues and methods. Economic Warfare as defined by Chu meant that "guerrilla detachments, despite their lack of arms and equipment, [ital. mine] must be prepared to lead this struggle against the enemy by adhering to the "following rules":

- Confiscation of all enemy property within their areas of operation.
  - Confiscation of all property owned by traitors.
- Encouragement of economic assistance of the masses.

In the section on "The War of Armaments," Chu noted:

The enemy is well armed and we [the guerrillas] are not.... Yet, armament is not an all-powerful factor in warfare. Every weapon loses its effectiveness under certain conditions. For instance, planes, armor, and heavy weapons lose much of their effectiveness at night. [At least they did in 1938, when Chu wrote this.] Furthermore cutting the enemy's supplies and communications will largely neutralize this superiority in armament... Our basic aim in reference to arms and equipment is to capture from the enemy as many new weapons as possible and to learn how to use them against the enemy himself.<sup>6</sup>

Apparently, Chu's advocacy of these practices was effective. In 1943, he wrote in a report on his activities against the Japanese that his forces had been able to obtain "rifles. . . . 95,000; light and heavy machine guns over 2,000; pistols, 4,027; anti-tank guns, 29; field guns, 73; 'quick-firing guns,' 225," and "two anti-aircraft guns" along with "thousands of head of horses," and "592 drums of American gasoline."

The last commodity was, no doubt, especially appreciated in light of the next section of his manual. In this part, "The War of Transportation and Communications," Chu noted that:

The front and rear in modern war are of equal importance. The requirements of food, arms, ammunition, gasoline, and other supplies, all indispensable for motorized forces, are increasing tremendously. The severance of the front from the rear in any modern war can mean the difference between defeat and victory for a whole army.

This is why modern army contact is a decisive condition for victory. Armor, complex weapons, and

planes all require the utmost of highly developed and smoothly flowing communications. For this reason guerrillas should concentrate upon this potential weakness of the enemy . . . . 8

Furthermore, Chu advocated that "guerrillas *must* be resourceful in the extreme, (ital. mine), endeavoring to achieve victory by any and all methods and situations at their disposal. . . . Guerrillas with few weapons and little in the way of equipment, can achieve permanent victories when they receive the support of the masses. . . ."

It was this doctrine of "extreme resourcefulness" that Chu most successfully put into practice in 1941 in what became known as the "Nanniwan Movement," which was reportedly his "pride and joy."10 In this campaign, Chu sent a brigade to a devastated region of China where the unit found a "two-thousand-pound bell in an ancient abandoned temple." From this stock of metal, by hand and craft methods, "they fashioned their first plow, hoes,...picks and shovels to excavate living quarters in the hillsides, the first tools to make furniture and dig wells." In short order they imported some animals from outlying areas and created spinning and weaving cooperatives for clothing. They also began producing necessary foodstuffs and useful war materiel-not the least of which were land mines which "the people had been taught to make ... of every kind...." Furthermore, along with their underground quarters, "they dug underground air-raid shelters which they extended into long tunnels which often connected different villages. Inhabitants of a village under attack could take shelter in another [village]...." In the meantime, enemy troops who had been slowed down by the simple-but-effective domestically produced mines liberally sown on the surface paths leading to now-deserted villages "would find themselves suddenly surrounded by...troops who arose out of the earth behind them."11 Clearly in Chu's scheme of insurgency logistics, resourcefulness was taken to a holistic operational end.

Another associate of Mao and Chu's, Ming Fan, wrote a companion to *On Guerrilla Warfare* titled "Textbook on Guerrilla Warfare." In this work, Ming was even more specific on the role and supply of "Weapons and Ammunition for Guerrillas." He wrote that even though the weapons of the enemy may be "far superior" in "scope and effectiveness,"

because of the guerrilla methods, they are not as decisive "as in regular warfare." His "textbook" went on to claim that the insurgents' presumably inferior logistics position was not insurmountable:

...weapons are not difficult to obtain. They can be purchased from the people's 'self preservation corps.' Almost every home has some sort of weapon that can be put to use. Local governments and police headquarters usually have weapons. Furthermore, pistols, carbines, and 'blunderbusses' can usually be manufactured in local guerrilla established plants. 13

Ming further noted that ammunition for such weapons could be obtained in the following ways:

...given by friendly troops [i.e. subverted by sympathizers from the government the insurgents are fighting against]...purchased or appropriated from the people...captured by ambushing enemy supply columns...purchased under cover from the enemy army... from salvage in combat areas...from the field of battle...self made [or adapted] by the guerrilla organization especially items such as grenades....<sup>14</sup>

Presumably, mines and bombs figured into the latter list too.

Another section of Ming's "textbook" was devoted to "Supply and Hygiene for Guerrillas." Here he noted that "of the various essential needs ....only supply and hygiene are absolute necessities" and that "problems of food and water and medical attention...must be solved...."15 From Ming's perspective, larger units were logistic liabilities because of the difficulties of obtaining larger amounts of supplies. Since guerrillas had to rely on "the masses" for foodstuffs and supplies, they had to be careful not to unduly burden the masses in their areas of operation, lest the masses turn against them. In the guerrilla's view, it was better to take advantage of the "clumsiness" of large occupying conventional forces insensitively tramping through the populace, stirring up alienation and sympathy for the insurgent cause. The people, it was assumed, would then express their sympathy for the insurgents with widespread low-level "penny packet" logistic support.

In terms of organizing labor for supply and support activities, the textbook further advocated that "guerrillas should also divide their units according to age and sex. Young women could be organized into 'Women's Vanguards,' older and weaker females into 'Mending and Cleaning Units,'...and the aged assigned to routine warning and sentry duties." This division of labor was seen as a

method for most efficiently taking advantage of every potential means of production—something of logistic significance in the relative poverty of a guerrilla economy. More valuable still was that the use of such ubiquitous personnel by the insurgents made it less likely that they (the personnel) would be identified as performing militarily useful logistics activities.

As detailed and effective as Mao and his comrades' guerrilla logistic "doctrine" was, it was left to another disciple of communism to refine the doctrine and adapt it to a style of insurgent warfare that effectively blended and evolved guerrilla and conventional methods as required. This time, though, it was the French and then the Americans instead of the Japanese who would be slow to appreciate the importance of logistic methods in this style of warfare.

#### **Vietnam**

Ho Chi Minh and General Vo Nguyen Giap, who had both spent substantial formative periods with Mao and his Chinese guerrillas, adopted everything that Chu had advocated logistically in *On Guerrilla Warfare*.<sup>17</sup> In the hands of Ho and Giap, guerrilla or insurgent logistic practices became something of an interim "underpinning" while more modern or industrial sources of supply and methods of delivery were cultivated and infrastructures were developed.

In the early years of the Indochina War, reliance on Mao and Chu's logistic methods was particularly significant. From the beginning, the guerrillas practiced the Maoist doctrine of obtaining weapons and materiel by seizure whenever possible. While resisting the French, the indigenous Vietnamese communist insurgent movement, the Vietminh, developed quite a record of capturing and coopting French supplies. One particularly illustrative example of their successes will suffice. In May of 1953, the Vietminh, organized into roughly three companies, "attacked a training school for potential leaders at Namh Dinh." All 600 trainees and the complete account of weapons and ammunition for the school "were captured-without the loss of a single Vietminh soldier."18 No doubt that experience provided a most enduring lesson about the viability of Vietminh logistic methods.

When preferred weapons could not be easily captured, the Vietminh were not above capturing,

salvaging from the field, or buying from corrupt officials whatever materiel was available. When obtainable anti-tank mines or large caliber artillery shells did not necessarily match up with their weaponry or otherwise fit their requirements, the Vietminh still viewed these items as valuable raw materials for remanufacturing materiel more suitable to their tactical purposes. By these methods, the Vietnamese insurgents' creativity, ingenuity, and capacity became legendary. In this regard they were also following the directives of Chu's tenacious logisticians who had recycled by hand the 2,000-pound bell to suit their military purposes decades earlier.

## LOCs and Bases: Webs v. Lines, Rafts v. Islands

If the insurgents were willing to creatively assess what things could be transformed into valuable materiel, they were similarly flexible in their views concerning labor and personnel engaged in logistic support activities. Vietnamese Communist insurgents, in part inspired by their Chinese predecessors, were particularly impressed by and willing to take advantage of female labor. They used women either as unexpected combatants or as overt or surreptitious logistic supporters (especially porters and couriers).

Out of necessity, the Vietminh were probably more enlightened in their use of women for logistic functions than were either their South Vietnamese antagonists or the American forces. Their flexibility played out in some surprising and noteworthy ways as the Vietnamese insurgents' logistic methods evolved and matured on the Ho Chi Minh Trail. This was particularly true when it came to maintaining the trail as a flexible logistic instrument and providing logistic support to transporters who stopped at binh trams (mobile rest and support stations) along the way. One young woman gained fame for her expert single-handed administration of one such way station for fighters heading south. There, "she provided them with food: rice . . . supplied by the army and edible greens that she collected" along with a place to sleep if required. 19 At other binh trams and surreptitious, ephemeral logistics "rafts" that were relocated as required and buried in jungle off the trails, women worked as nurses, cooks, and equipment repair and fabrication personnel. Thousands of other women and girls worked to widen, repair, and make detours on the trail as necessary.<sup>20</sup>

Because the American military continued to poorly appreciate the number of women involved in fighting for and providing supplies to the Vietcong insurgents in often unorthodox ways, strategic planners continued to miscalculate the nature and magnitude of the combined Vietcong-North Vietnamese Army (NVA) efforts. As a result, they failed to consider or devise effective ways to negate or co-opt the women's efforts.<sup>21</sup>

Discussion of insurgent or guerrilla use of the Ho Chi Minh Trail as a Line of Communication (LOC) is even more interesting when it is compared to the LOCs employed by American, South Vietnamese, and other allied Free World forces operating in South Vietnam. American popular conceptions of "the trail" are usually based on maps such as the one in figure 1. Linear, simple, and direct, they are comparable to our own LOC mapping practices. The reality was much more complex.

From the late 1950s on, the communists were anxious to "foster the impression" that they "were in total adherence" with the terms of the 1954 Geneva Accords, which prohibited military buildups by either regime in either zone. Consequently, they explored various alternate means of covertly pursuing these prohibited activities. In May 1959, the North Vietnamese leadership created a logistics unit, called Group 559, for the purpose of expanding the traditional infiltration route to the south—the Ho Chi Minh Trail.<sup>22</sup> The trail, or rather *trails* (here the common use of the singular form for a plural entity made for a problematic verbal-mental construct), were in reality "a network of thousands of paths" that had existed for generations, beaten by the feet of "countless . . . highland tribesmen, rebels, outlaws, opium smugglers," and others who thrived on the concealment generously made possible by the rugged terrain and tall dense vegetation, much of it reaching to heights of over 200 feet.<sup>23</sup>

To Western eyes as late as the mid-1960s, the existence of such a robust trail seemed to be an impossibility or the stuff of myth and legend. But by 1967, it had become in fact a "massive maze of roads, bridges, waterways and paths." The U.S. Special Operators who encountered it described it as a "spider web… on top of a web… on top of web" or "a guerrilla's Appian Way." Others claimed a map

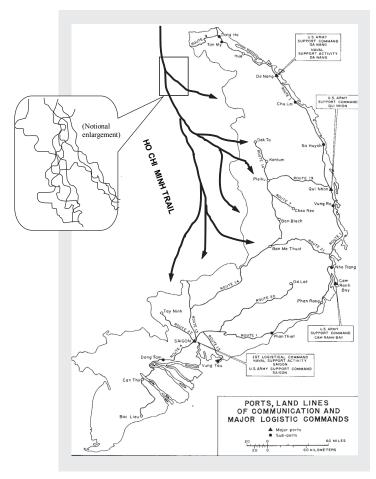


Figure 1. A U.S. "map" of the Ho Chi Minh Trail.

of it would have looked like a "rye grass root, an ancient family tree, a dendritic river, or the human nervous or cardiovascular system . . ." Its extent or length was also the subject of much conjecture. In 1967, U.S. estimates placed it at 200 miles; by 1969 that figure was revised to 2,000; and by 1971 still another revision placed it at 4,000 miles.<sup>24</sup>

Notwithstanding American claims that they had covered every inch of the trail with electronic sensors and spent almost a billion dollars a year doing so with the "most efficient electronic system ever devised"—a system managed with state-of-the-art computers—results were far from decisive.<sup>25</sup> This program was linked to other efforts to eliminate the trail's obscuring foliage by any means possible in any place that the route's problematic tentacles were thought to pass. Despite these efforts, postwar revelations by Hanoi placed the expanse of the trail at easily twice what the Americans were tracking: between 8,500 and 12,500 miles. Hence,

prodigious quantities of materiel still managed to get through.<sup>26</sup>

As the war continued into the early 1970s, the trail continued to be progressively and amazingly improved, thanks in part to its covert characteristics and its continuous relocation into sanctuary areas in Cambodia and Laos.<sup>27</sup> By the mid-1970s, the trail had improved to such an extent that much of it could routinely accommodate increasing numbers of motor trucks, which more and more came to replace porters and bicycles.

Efforts to map the trail were frustrating at best. For American operators trying to interdict it, their first problem for much of the war was just trying to locate "it," even with their tremendous technological sophistication. "It" was a moving target. "It" did not relocate in any mathematically predictable or programmable way. "Its" veiled random resilience was maddening, despite bold claims to the contrary.<sup>28</sup>

In contrast to those used by their communist enemies, American logistic methods in Vietnam were linear in orientation and relied upon conventional brute-force logistics with a growing emphasis on bulk delivery methods. For the most part, there was nothing surreptitious or small scale about American LOCs, the log bases that they ran between, and U.S. logistic practices. For the Americans, counterinsurgency

was a relatively new or unfamiliar style of war, at least in light of their recent experiences in Korea and during World War II. Because secure rear areas were increasingly hard to come by and the technology being brought to bear in the war was increasingly dependent on a sophisticated support infrastructure, base camps and log bases were created to provide relatively secure places where such logistic requirements could be performed. As such, these bases became logistic islands firmly anchored in a sea of insecurity.

The creation of such logistics or operational support bases theoretically provided other advantages. First, they established "a government presence in the area of operations." Second, they were supposed to aid "in limiting guerrilla mobility in the immediate vicinity." And third, as a result of limiting guerrilla mobility, they were supposed to provide "a measure of security to populated areas close by." At no time, though, were these functions supposed to overtake

the bases' primary mission of providing logistic support to combat units.<sup>29</sup>

Again, the reality proved to be somewhat more complex. While combat commanders liked having the relatively reliable support that such island-like logistical launching pads provided, they did not like the fact that these bases "tended to devour their combat resources and [become] 'the tail that wagged the dog."30 By 1968, their complaints had arrived at the Department of the Army, whose "solution" was to "approve a personnel increase for base camps," complete with further increases in logistic requirements anything to insure the invaluable bases' reliable administration and support.<sup>31</sup>

In keeping with Mao's and Chu Teh's prescriptions for guerrilla logistics, the Americans' adoption of the base camp method of logistic support (figure 2) proved to be something of a dream come true for the insurgents. The bases provided fat, juicy targets that didn't move much, and as such, they were often the targets of the insurgents' avowed covert methods of corruption and theft by duplicitous local sympathizers hired

on to perform menial labor. Even more enticing was the high volume of predictably rich logistic traffic that flowed between the bases. Despite the increasing use of tactical and intra-theater air for logistics, the primary method of resupply for most of the war remained overland, by road.

The bases supporting the 25th Infantry Division at and surrounding Cu Chi (figure 2) provide a good example of how these practices played out in reality. By the summer of 1968, the Cu Chi bases were being supported by 4 convoys a day, totaling over 268 vehicles, being pushed out from the Long Binh depot complex. Despite taking all the "usual precautions," including planning for well-placed artillery support, patrols, ambushes, search-and-destroy operations along the route, emplacing outposts at critical junctions, etc., problems with guerrilla attacks persisted.<sup>32</sup>

Frustrations with recurring losses rose to such a level that in August 1968 the 25th Division

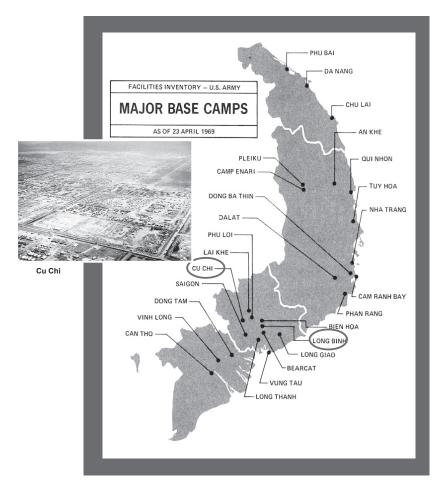


Figure 2. U.S. base camps in the Republic of South Vietnam.

"developed new aggressive convoy procedures."33 Whether by design or not, mimicking the insurgents' smaller scale delivery methods proved beneficial for counterinsurgency operations. Now, "convoys were divided into smaller, self-sufficient march units." Furthermore, "ammunition and fuel vehicles were placed at the rear to prevent an entire convoy from being blocked by burning vehicles, wreckers and spare vehicles were added. . . . a major innovation was having the convoy commander airborne . . . from where he directed march units and security forces. . . . [and] gunship cover was arranged ahead of time," particularly for sensitive passages. Convoy personnel were retrained on the new robust procedures. It did not take long for these new methods to reap results.34

Instead of being sources of insurgent supply, U.S. convoy forces began to kill substantial numbers of enemy attackers and capture their weapons. By taking this approach, "the division had turned a

defensive situation into a highly profitable offensive maneuver" [ital. mine]. Besides limiting the insurgents' resupply capacity, this practice had a positive effect on the surrounding civilian communities. The roads also became safer for civilian commerce and agricultural activity. By taking this approach, U.S. forces finally started to effectively address one of the operational logistics tenets of the Mao-inspired communist insurgents. These developments suggest something about the possibilities for logistically delivering—literally—the desired stability outcomes supportive of civil life.

Not all insurgent logistic activities and gains were as dramatic or deliberate as attacks on resupply convoys. Poorly executed American operational activities afflicted by seemingly inconsequential materiel losses fed by a poor appreciation of the importance of supply discipline in a counterinsurgent environment also provided the insurgents with some surprising and very real gains. For example, U.S. efforts to interdict activity on the Ho Chi Minh Trail by B-52 bombing proved to be problematic and inexact. Inadvertently, this tactic delivered a logistic silver lining to the Vietcong who traveled the trail and were hard-pressed to keep enough protein in their diet on their long and arduous journeys. Neither those who planned the B-52 sorties nor those who flew them knew that the 30-foot craters their bombs made filled up with water in the rainy season and "often saw service as duck or fish ponds." In this capacity, the new ponds "play[ed] their role in the guerrillas' never-ending quest to broaden their diet." They provided a particularly valuable source of protein at a point in the guerrillas' journeys when their nutritional needs were becoming acute.<sup>37</sup>

On the other end of the ammunition scale from the 500-pound bomb was the problem of small arms rounds. The Vietnamese communist forces' use of the AK-47 rifle is legendary. Less well known was that, for logistical reasons, they also developed a keen affection for the American M-16, even though it was a much more temperamental weapon. A former Vietcong company commander interviewed after the war by William Broyles, a Marine Corps officer turned journalist, told Broyles that "most of us carried M-16s [because] it was so much easier to get ammunition. You [the Americans] were always dropping magazines full of it, or we could buy it

from the puppet [South Vietnamese] forces.<sup>38</sup> These cases serve as nice examples of the importance of understanding the linkages, such that they are, between your own operational and logistics practices and those of your enemies—particularly in counterinsurgency warfare.

Along with the important issues of supply discipline and failing to understand the secondary effects of operational and logistical activities, a couple more related points are worth mentioning here. While in Vietnam, the American Army did its best to not only arm the Army of the Republic of Vietnam (ARVN) with modern American materiel, but to inculcate the ARVN with the American-style technology-driven big-army logistics methods required to sustain such materiel. As part of its assistance to the Republic of South Vietnam, the United States sold or gave its ally millions of dollars of materiel and sent hundreds of South Vietnamese to school to learn how to maintain it.<sup>39</sup>

In the U.S. effort to build up the ARVN, particularly during the last phases of the war, it seems that incomplete consideration was given to the logistic suitability and the long-term sustainability of such high-tech, logistics-intensive equipment, given the cultural and economic liabilities endemic to South Vietnamese society at the time and the inevitability of a comprehensive American pullout. 40 By contrast, the NVA's more gradual adoption of modern "big-army logistics methods" was more enduring because it was accomplished at a pace sustainable by the North Vietnamese themselves and was not overly reliant upon the overwhelming beneficence of any one foreign national benefactor. (All Sovietbloc countries were contributors of industrially produced materiel, as was China.)

Furthermore, the North Vietnamese logistic modernization effort was accomplished "on top of a base" of primitive guerrilla logistics that never really went away. While it is true that guerrilla logistic methods are often slow to regenerate combat power (hence the insurgents' characteristic strike-lull-strike operational tempo), particularly in the face of overwhelming strikes, the retention of this resilient "reserve" capability kept the proverbial logistics rug from ever being completely pulled out from under the Vietnamese Communist forces. The result was that, just as the NVA completed its modernization and logistics transformation and

was ready for the final push into Saigon, the ARVN was increasingly forced to sustain new high-tech equipment by itself.<sup>41</sup> This was something it was ill-equipped to do because its logistic capability had been artificially grafted onto it and was not linked to any indigenous or locally sustainable logistic capacity. In contrast, the NVA's logistic capabilities were more suitable and sustainable because they were authentically homegrown.

### **Final Thoughts**

What logistic lessons might be instructive for modern counterinsurgency warfare in other cultural or ideological environments? How do the latest rounds of admonitions by political scientists such as Stephen Biddle about the perils of conflating "the communal civil war" now brewing in Iraq with the "Maoist 'people's war' of national liberation" that took place in Vietnam square with our understanding of insurgent logistic practices and how counterinsurgency logistic efforts might be more efficiently and effectively conducted?<sup>42</sup> While Biddle's caution has some validity, in some important ways the Maoist logistic prescriptions are unique among Maoist doctrines. When examined closely, the Maoist logistics doctrines are not intimately linked or dependent upon any one political ideology, communist or otherwise, for their utility or applicability. Thus, the

insurgent logistic doctrines remain practical prescriptions for any organization or movement seeking ways to develop logistic capabilities and combat power against state forces and authorities.

In assessing Maoist doctrine and its relevance to current hostilities in the Middle East, one might also consider the similarity between, and the logistic strength provided by, the extended-family-like brotherhood developed by various communist parties and the real extended family structure of tribal and clan affiliation now significantly found within a larger Islamic cultural framework. This

similarity is supported by the work of scholars such as David Ronfeldt, who has analyzed the role of "extreme tribalism" in the shaping of modern asymmetric threats. 43 While tribal constructs, either extreme or not, are clearly motivated by vastly different ideologies, belief systems, and social network orientations, their significance to the logistic support of insurgencies cannot be ignored, despite American strategists' historical tendency to do so.44 Furthermore, in counterinsurgency operations, we cannot continue to be blinded by our own culturally based ideas about what kinds of networks are logistically significant. Nor can we continue to assume, as we did in Vietnam, that new technology will satisfy our need to address these types of complex enemy logistic networks. At their heart, these problems are social and conceptual and not amenable to engineered solutions. Also not to be ignored in insurgent logistic networks is the significance of predominant cultures of corruption (as defined by post-progressive Western values and codified in Western political and economic tenets about the value of private property, the role of government to provide services to all classes of citizens, and the rights of individual agency).

Finally, there appear to be more than a few parting points to ponder about the logistics of insurgency and counterinsurgency warfare as experienced by the United States in Vietnam:



The same old business? A U.S. Air Force convoy team with 557th Expeditionary Red Horse Squadron returns to Forward Operating Base Marez, Iraq, along Main Supply Route Tampa following a delivery of construction supplies to Contingency Operating Base Speicher, Tikrit, Iraq, 16 September 2006.

- Operators at all levels of war must be mindful of the implications of using overt and covert LOCs and logistics bases. It appears that in counterinsurgency, direct or linear LOCs are not always the most effective.
- There are benefits for both insurgents and counterinsurgents to using complex logistics networks that can take advantage of redundancies and quick regeneration capabilities.
- Bulk logistics have liabilities too. Sometimes a steady, stealthy "small packet flow" can deliver more, for both types of combatants.
  - Robust LOC defenses can be turned into a

highly effective form of offensive maneuver against insurgents.

- Insurgents continuously and vigorously seek to negate and co-opt counterinsurgency high technology to better preserve or improve their own logistic posture. This should not be surprising as it is a tenet of existing insurgent doctrine that is applicable to a wide array of ideological causes and cultural conditions.
- Indigenous counterinsurgency capabilities, like those of successful insurgents, must be linked to indigenously sustainable logistics capabilities.

Lastly, never forget that in insurgencies, "their" logistics is often "your" logistics! MR

#### **NOTES**

- 1. This article draws upon a paper previously written by the author titled "The Roots of Responsive Logistics: Trails and Tails in Vietnam," presented on 3 August 2005 at the Combat Studies Institute's annual conference ("An Army at War: Change in the Midst of Conflict") and published in the proceedings of that conference by John J. McGrath, general editor, Combat Studies Institute, Fort Leavenworth, KS, 2005, 229-245.
- 2. Full text follows, with excisions in italics: "It must first be noted that the Japanese aggressor is a strong imperialist power whose invasion of China is based upon a relatively advanced stage of industrial production and of army-navy-air techniques. However despite the higher level of the enemy's industry, he remains an imperialist power deficiently gifted by nature. He has not himself been able to mass enough human, financial and material power to last out a prolonged war and to cope with an immense theater of war. In addition to this, anti-war sentiment is developing amongst the Japanese people which is affecting the morale of the lower officers and the broad rank and file of her army. Besides, Japan's opponent is not limited to China alone, hence she cannot devote her entire force of men and material to an invasion of our country. The most she can devote is about a million men as she has to reserve her forces to deal with other powers. On account of these reasons Japan's war of aggression is definitely disfavored by a prolonged war and by the extensive occupation of territory. Strategically Japan is forced to demand a war of guick decision. It would be difficult for her to continue if we could persist for more than three years." From Mao Tse Tung, "Problems in the Guerrilla War of Resistance against Japan," in Chu Te, et al., On Guerrilla Warfare (n.p., 1939), reprinted in Gene Z. Hanrahan, ed., Chinese Communist Guerrilla Warfare Tactics (Boulder, CO: Paladin Press, 1974), 17.
- 4. Chu Te is referred to as "Chu Teh" or "Chu Geh" under the Wade-Giles system of romanizing Chinese names. Today in the People's Republic of China, his name is romanized as "Zhu De," according to the Pinyin system. In both forms of romanization, Chinese family names come first and so, when referring to individuals by one name, the first one is used (e.g., Mao, Chu, or Ming respectively). This article uses the Wade-Giles spelling because that is the system used by the sources cited. See endnote 7 below. Chu Teh went on in the 1950s to become the Commander in Chief of the People's Liberation Army, also known as the Chinese Red Army. See Chu Te, "On Guerrilla Warfare," in Hanrahan, 3, 63-74.
  - 5. Ibid., 66-69
  - 6. Ibid., 69.
- 7. Agnes Smedley, The Great Road: The Life and Times of Chu Teh (New York and London: Monthly Review Press, 1956), 387-88. Agnes Smedley was an American correspondent who worked out of China for much of the 1930s and the Second World War. While she has proven to be a controversial figure, and various charges of espionage continue to influence the accounting of her life, her biography of Chu Teh is one of the few detailed sources of his activities in this period. It also provides a wealth of insights difficult to find elsewhere about the logistic practices of Chinese insurgent guerrilla fighters.
  - 8. Te, "On Guerrilla Warfare," 69
  - 9. Ibid.
  - 10. Smedley, 386.
  - 11. Ibid., 387.
  - 12. Ming Fan, "A Textbook on Guerrilla Warfare," in Hanrahan, 76-78.
  - 13. Ibid., 76.
  - 14. Ibid., 76-77. 15. Ibid., 77.
  - 16. Ibid
- 17. Julian Thompson. The Lifeblood of War: Logistics in Armed Conflict (New York: Brassey's, 1991), 134-135.
  - 18. Ibid., 162.

- 19. Huu Mai, in Bich Thuan, "Women Gunners in Quang Binh," in The Mountain Trail (Hanoi: Vietnam Women's Union, 1970), 117-36, cited in Sandra C. Taylor, Vietnamese Women at War: Fighting for Ho Chi Minh and the Revolution (Lawrence, KS: University of Kansas Press, 1999), 120-121.
  - 20. Ibid.
  - 21. Taylor, 81
- 22. Stanley Karnow. Vietnam: A History (New York: Penguin Books, 1983). 253-254
- 23. Richard L. Stevens, The Trail: A History of the Ho Chi Minh Trail and the Role
- of Nature in the War in Vietnam (New York: Garland Publishing, 1993), x. 24. Ibid., x-xi citing "The Special War," Time, 19 May 1967, 34; Michael Maclear, The Ten Thousand Day War: Vietnam, 1945-1975 (New York: St Martin's Press, 1981), 151, 172-173, 182; "The Indispensable Lifeline." Time, 15 February 1971, 28; "Untold Story of the Ho Chi Minh Trail," U.S. News and World Report, 15 Febru-
- 25. Paul N. Edwards, The Closed World: Computers and the Politics of Discourse in Cold War America (Cambridge, MA: MIT Press, 1996), 3-7; George L. Weiss, "Battle for Control of the Ho Chi Minh Trail," Armed Forces Journal (15 February 1972), 19.
  - 26. Stevens, xi
  - 27. Ibid., x-xi.
- 28. Weiss, 19. One Air Force officer went so far as to boast that they had "wired the Ho Chi Minh Trail like a drug store pinball machine and we play it every night." The author of this 1972 article smugly suggested that the "real secret about the 'secret war' is that this time we may be winning." Unfortunately, subsequent events and revelations proved him wrong.
- 29. Department of the Army, U.S. Army Counterguerrilla Operations Handbook (Reprint) (Guilford, CT: Lyons Press, 2004), 7-1-7-2. This source does not address Vietnam-era doctrine, but it is reflective of the thinking in that period about logistics bases.
- 30. John H. Hay Jr., Vietnam Studies: Tactical and Materiel Innovations (Washington, DC: Department of the Army, 1989), 151.
  - 31. Ibid., 151-152.
  - 32. Ibid., 154
  - 33. Ibid.
  - 34. Ibid., 154-155. 35. Ibid
  - 36. Ibid.
- 37. Trong Nhu Tang with David Chanoff and Doan Van Toai, A Vietcong Memoir (New York: Harcourt Brace Jovanovich, 1985), 167.
- 38. William J. Broyles, Brother In Arms: A Journey from War to Peace (New York: Alfred A. Knopf, 1986), 194.
- 39. James Lawton Collins Jr., Vietnam Studies: The Development and Training of the South Vietnamese Army, 1950-1972 (Washington, DC: Department of the Army, 1986), 103-104, 111
- 40. Lt. Gen Dong Van Khuyen, Indochina Monographs: RVNAF Logistics (Washington, DC: U.S. Army Center of Military History, 1980), 453-4. Lt. Gen Van Khuyen notes that "ARVN logisticians only embraced modest objectives for their self-reliance program, which began in 1969 with the Vietnamization process. 41. Thompson, 217-218.
- 42. Stephen Biddle, "Seeing Baghdad, Thinking Saigon," Foreign Affairs 85, no.2 (March-April 2006): 2-14.
- 43. David Ronfeldt, "Today's wars are less about ideas than extreme tribalism," Christian Science Monitor (Monday, 27 March 2006), 9.
- 44. Ibid. Ronfeldt claims that American strategists have a preference for the optimistic 'end of history' idea" as advanced by Francis Fukuyama in 1989 and find the construct of "tribalism . . . too anthropological" for their comfort.