

Winning cityfights: shielded infantry with siege engines not empty posturing

By Michael Sparks and Emery Nelson



"If history is any teacher, it teaches that when you become indifferent and lose the will to fight, some other son-of-a-bitch who has the will to fight will take you over"

--Colonel Arthur D. "Bull" Simons, U.S. Army Special Forces, leader of the [Son Tay](#) and [EDS Iran rescue missions](#), made into a TV mini-series, [On Wings of Eagles](#)

"The Ranger platoon had been unable to break through after being badly ambushed, losing one or two vehicles and suffering several casualties....."

"It was apparent that neither the Ranger Ground Reaction Force platoon nor Company 'C' was going to be able to fight through to the crash site...two helicopters had been shot down in the Bakara Market area in the heart of General Aideed's [guerrilla](#) enclave, and a company sized element of TF Ranger was surrounded and fighting for their lives, taking heavy casualties...."

"The pilots would not fire from stationary positions because of enemy ground fire, but would execute 'running' gun runs...'Running' fire is not as accurate as 'stationary' fire...Air strikes are still only suppressive fire, however, and did not completely destroy enemy positions or buildings. Many buildings that were struck were reoccupied by Somali guerrillas within minutes..."

-U.S. Army Captain Charles Ferry, a leader in the battle to rescue U.S. Army Rangers/Delta operators trapped in Mogadishu, Somalia on October 3, 1993. The deadlock wasn't broken until allied nations with armored vehicles (some U.S. hand-me-downs) were begged and coerced by the 10th mountain Division (Light) to come save their comrades.¹

Today, the U.S. military is spending countless BILLIONS of dollars on weaponry, yet we still cannot deliver war-winning, ground-taking forces by AIR in a timely manner, and even the forces we have are not capable of winning city fights without heavy casualties in an increasingly urbanized world. Closer examination will reveal that this weakness is not by accident, but by **psychological design** and stems from a fundamental lack of classical military understanding by the military profession itself and the resultant lack of correct direction from

civilian oversight.

Before we continue let's consider the After Action Review of an Israeli Army officer from recent COMBAT in the middle east:

OPERATION JENIN: Israeli Officers view.

"Armor.

First of all, [armor is a necessity, not an option. When faced against a prepared and well armed enemy in MOUT, you don't really have a choice but to use armor](#) ([unless you decide to wipe out the city](#)). [Light infantry by itself simply doesn't cut it](#). [Ranger-type forces in their Humvees will not do well- to put it mildly](#) - in any urban environment with heavy sniper and machinegun fire. Any the least bit competent and prepared enemy will be able to hold their defenses almost indefinitely, until you either pay with 5-7 of your own for one of his, or bring in the heavy guns and [engineering vehicles, bulldozers](#), etc., Contrary to the popular belief, the most valuable armored asset in a city is not a tank, or an assault gun, or a howitzer. It's a **bulldozer**, a.k.a. D-9 the "Zionist Monster". They don't call it that for nothing, the thing really is huge and ugly. And it's the most effective weapon by far, its blade is better than 120mm HE and more reliable in bringing down walls and buildings, clearing pathways or just shaking - literally - civilian inhabitants out of their dwellings, without worrying too much about mines or booby-traps. Unlike the tank, it can be a lethal or a non-lethal weapon, when you need it. It is also much less vulnerable to mines, because of the higher clearance, and against RPGs it can be equipped with the same ERA as the tank.

In Jenin, our Soldiers could not advance until they brought in the bulldozers, the helicopters - Cobras and Apaches - firing their cannons and missiles, just could not suppress the palestinian fire (I'll write more on the issue of helicopters and 20-30mm guns in general later). The D-9s cleared pathways for the troops and tanks to pass, destroyed buildings where the gunmen remained. Obviously, armor is vulnerable, and as much as it's useful, it also requires a lot of attention. The ratio of infantry to armor is at the very least one level up - battalion of infantry per armored company, and usually should be higher, battalion per platoon.

Combat at night

The night is yours - at night, you have the advantage. You have night vision equipment, you have IR designators, you can move around, point to targets. All your tanks, helicopters, and the rest of your support have night capabilities as well. Moreover, tanks have thermal sights, even better. You can operate at night as well as during the day. However, your enemy can't. In most cases, the enemy will not have a lot of night-vision devices, if any at all. All operations must be carried out at night, if possible. If not -think about it again and do it at night. Since darkness is your friend, it's a good idea to cut electricity supply to keep your enemy in the dark.

Multi-level fighting

Much has been said about breaking through walls, and I'm not going to repeat it. Instead I want to talk about two other things - top floors, and sewers.

Top floors, roofs, etc., are prime locations to control the streets. Both for your own forces and theirs, obviously. Taking the high ground is imperative in any urban operation, the sooner - the better. In some cases, this can even be done by dropping heliborne SF teams on some roofs, but more on this later.

Helicopters

Helicopters are good not only for transport, but to clear the roofs once you move in. Their guns aren't very effective against concrete walls, but at least they can keep the roofs clean. Now while the roofs will be yours, the sewers won't. Sewers provide underground passages and communications for the local guerillas, allowing them to move from block to block, transport ammunition, etc.. It's not a good idea to go down there and hunt them. This can be dealt with by either simply collapsing some of the sewers, or flooding them. This is dangerous, because unless the sewage system is restored at some point, it will create a "humanitarian disaster" or in other words, you'll start drowning in it. However, there isn't really any other way to deal with it.

Snipers

You have them, but your enemy has them too. The pals had them, most of our casualties in Jenin who weren't killed in the booby-trapped house, were killed with shots in the head or neck. They're not all just shooting their guns in the air on demonstrations, some of them know how to use them, too. A piece of statistics

In Chechnya, during the day most of sniper shots were concentrated in two areas - head/neck, and the groin. Why groin ? Because it's incapacitating, it takes two people to take care of a wounded Soldier, and it's humiliating.

At night, most shots were in the lower jaw. Which goes to show you the real dangers of smoking. Two problems when encountering sniper fire in a city - First, often there's not enough top protection. They will shoot from the top floors (not from the roofs usually, they're too open), just go ahead and try to open your hatch... without any overhead cover in most cases, you're a good target.

Second, when you rush into the building to get the sniper, chances are the stairway will be booby-trapped, and the sniper gone through an escape rout you don't know about. This is where the tanks come in handy. The main advantage in snipers you'll have is better training, and more night scopes. Also, guerilla-type opponents don't usually have long-range 12.7mm or Lapua rifles, so you might get an advantage in range as well. In order to use it, you have to identify and take control of key locations, like high buildings on intersections that cover the most ground or important streets.

Aerial reconnaissance by UAVs is probably the best way to identify these targets. You have to do it BEFORE you insert your main force into the inner city, special forces and recon should capture such points first and establish sniper position as

the main force advances. Timing is very important here - if you do it too soon, they'll be overwhelmed with the local militias, if you do it too late your main force will suffer casualties.

Obstacles

The enemy will without a doubt use obstacles to stop you advance. In city streets, concrete blocks and debris, sandbag barricades, trenchers, or combination of all the above can effectively stop the movement of armor and troops, if they're not assisted by bulldozers and combat engineers. A smart enemy won't try to block all the access routs at once. Instead, using a system of blocked streets he will try to lead you into a pre-defined Minutka square-style kill zone. However not all people realize that obstacles can serve you just as well.

For some reason many people think that urban warfare for the attacker is just breaking through barricades and buildings. This isn't true - you can use exactly the same methods, barricades out of concrete debris, and especially trenchers, to your advantage. The key here is to divide and conquer - first of all, you can establish obstacles around your target city, to prevent the enemy from getting out/getting reinforcements and supplies in. Once inside the city, you can separate between cleared-out zones and combat zones, prevent the movement of militias inside the city. Of course you can't stop them from moving around at all, but trenches for example will do a good job in preventing the movement of cars and trucks, which often have mounted machineguns/RPGs, and transport ammo and explosives. This also won't let them to use "rapid reaction" forces, consisting of a couple of trucks with mounted heavy machineguns or even ZU-23-2, which can form dangerous anti-helicopter and anti-infantry teams.

[Attack] Helicopters

Despite the IAF's performance in recent fighting, helicopters are vulnerable in the city, and not as useful as tanks. A well armed opponent can make the use of helicopters pretty difficult. Even during the combat with palestinians several IAF helicopters were slightly damaged by small arms fire, if they'd have heavy machineguns like DShK or KPVT, or even ZU-23, and more RPGs, they could've downed one or two.

In Mogadishu as we all know they've shot down two Black Hawks, and if they had any minimal tactical training, they could easily shoot more. Basically a helicopter is good as long as it's moving. Rapid insertion, hunting down groups of gunmen, some light fire support. If they start hovering around the same place for too long, they become targets. In terms of fire support, their usefulness is limited. First of all, the gun can't hit crap.

Second, when it can hit, it's not much use against real walls. The missiles aren't terrible effective either. A tank is always better, more accurate and far more effective fire support. The only drawback - it can't hit the top floors and of course not the roofs, here you have to use ADA vehicles such as the IDF had in Ramalla, [M113 with Vulcans](#), and helicopters.

Intelligence.

Three sources of intelligence exist in MOUT - observation, SIGINT, and HUMINT. Observation is done by aerial reconnaissance, most often using drones - UAVs. They can relay information in real time back to the commander, and you can use their photos as maps - this way you at least won't be surprised by a building complex the size of FBI headquarters that's not indicated on your map, or by a crater five streets wide made by your Air Force a year ago. It's also a great help in planning and later, identification of your own forces - you know exactly where they should be, so there's less possibility (but not a guarantee) that you'll start a fight with the second battalion over a street corner. > In short, drones are a great help.

Second is SIGINT, or radio interception. The enemy obviously has to communicate somehow, and you can learn valuable information by monitoring his calls. In a city, the most likely means of communication will be cell phones, and walkie-talkies. These are easy to listen too, so your biggest worry will be a translator who not only knows the language, but the slang they use as well. That you won't have, these people will be in intelligence, not infantry or armor companies, but it would be nice. We have it a little easier, because more Soldiers speak Arabic.

Last, but the most important, is HUMINT. It comes in two parts - your own intelligence gathering units, and informant from among the locals. For the first, we have the mista'arvim, or literally "those who turn into Arabs" (see www.isayeret.com/units/larticle.htm for more details), they're very successful, but very busy and usually unavailable. In any case, they're extremely helpful when it comes to infiltration into the local population, and can provide intelligence from "behind enemy lines"(or even from inside enemy lines).

As far as I'm aware, the U.S. Army or marines don't have such units, although the CIA does they won't do your dirty work. Although in a few of years... or maybe a bit more... I'm pretty sure you'll develop something similar.

The second, local informants, are easier to get - catch them, pay them - but aren't trustworthy. Never believe anything he says, unless it's corroborated by another source, or certain physical measures were applied. Unfortunately, such "measures" are forbidden, so you'll have to double check

The thing is, all three of these are also available to your opponent. They don't need UAVs and aerial photography, because they already know the area they're in, but the rest is very easy to get. For observation (and liaison) for example, they can easily employ kids - some 12 year old is going to hang out on the outskirts of the city, you're not going to shoot him, and he'll tell his bigger and better armed friends that you're coming.

Kids can be very attentive to details, especially in these things makes them feel like Soldiers. For HUMINT, the local non-combatants will always be more inclined to help their own, then you. The people you leave behind in cleared areas will be happy to supply information, and possibly weapons, ammunition, to the gunmen you haven't clear out yet.

SIGINT is also not rocket science. The Palestinians are monitoring our cell phones in Gaza for example. If they can do it, anyone can. Just a bunch of random thoughts. In the movie "Black Hawk Down", apparently there's a line (haven't seen it) where a Delta guy tells some Soldier "stay away from the walls, keep to the middle of the street" or something to that effect. If someone tells you something like that, hit the moron in the head with a brick so he'll be medivac'ed and won't do too much damage.

Keep off the middle of the street at all times, stay close to the walls, stay low. If you use flattop M4A1 with an optic as a designated marksman rifle, you'll need a [cheekpiece](#). They'll tell you that you don't need it, but in fact you do. Chances are, you'll have to improvise it - better think about it before and not after. Flashlights are useful if you're doing house-to-house, dark basements, stuff like that. If you're not a fancy SF type and you don't have an underbarrel flashlight that comes with your rifle, you can tape one to your handguards. It actually holds better than you'd think, and pretty useful sometimes."

Classical military war forms have always existed throughout the ages.² Notice their modern counterparts in parenthesis; infantry takes/holds ground (Airborne, Light, Air Assault, Mechanized), artillery suppresses and/or makes breaches (towed, self-propelled, at sea or dropped from aircraft), cavalry with more mobility than on foot secures flanks or maneuvers to strike at the enemy's center of cohesion to collapse him (men in track-laying tanks or helicopters), chariots and war elephants have been used as battering rams (tanks with large-caliber main guns). The Bible's warning "*that there are no new things under the sun*" is true, **everything we have today is an updated version of a war instrument we had in the past**. Thus, we can go back into military history and draw lessons from how these war forms were used to draw lessons for today's weapons. However, when you do this, you discover that there are war-forms that we have NOT emulated today---specifically, siege engines and shielded infantry---and the result is the men-against-fire paradigm of heavy casualties described by SLA Marshall and today virtual stalemate when fighting in cities.³

Shielded Infantry decisive in ancient times Genesis-1300?

In ancient 1st Generation warfare, where weaponry was primarily human-muscle propelled, infantry could carry a wooden and/or metal shield and defend himself from all hand weapon and bow-launched missile attacks. Siege engines defeated walled cities. Shielded infantry could even join shields into a *phalanx* of men in rows to create a human "tank" that could advance in the face of enemy fire. The *phalanx* allowed the commander to "hold" the enemy for his cavalry to maneuver and shatter him in his flanks/rear. Once the enemy cohesion was shattered; most deaths came in the pursuit as the enemy turned his back and had no shield. Alexander the Great's *phalanx* defeated enemies 100 times their size yet had amazingly low casualties because his infantry was shielded.⁴ At the battle of Issus, 40,000 Macedonians defeated 600,000 Persians, 100,000 of whom were killed. Alexander's lost only a few hundred men.

Infantry loses its shield with advent of machine weapons 1300?-1914

As Martin Van Creveld brilliantly concludes, a firearm is an internal combustion engine

operating in one direction.⁵ With the advent of firearms, war enters the "2d Generation" or the industrial age. Hand shields can no longer defend against missiles launched from metal tubes propelled by gunpowder. Artillery guns could breach walled cities. Infantry becomes unshielded. Casualties inevitably mount when using Napoleonic linear formations in the open from the devastation of firearms, forcing an endless series of tactics, techniques and procedures (TTP) designed to increase dispersion of men, utilize cover/concealment offered by the terrain, fire and movement tactics and other weaponry effects to defeat the men-against-fire hurdle. In WWI, the recoil-operated machine gun (Of the major combatants, the vast majority of WW I machineguns were recoil operated German and Russian Maxims, British Vickers, and even the US Browning M1917. Only the French Hotchkiss was gas-operated)and quick-firing artillery that recoiled in place turned Europe into a "*death ground*" that butchered millions of men. The riddle of men dug into trenches with inter-locking machine gun fire and huge amounts of artillery on call outraged military reformers who knew there had to be a better way.

In the allied camp, the siege engine was reborn as an armored shield in the form of a track-laying tank that would move ahead of the infantry and rumble over wire and destroy machine gun nests was created.⁶ In Germany, the French idea of infiltration by small groups was stolen in a trench raid and made into *Hutier* tactics that were successful in their final 1918 offensive.⁷ Both ideas were later combined in 1940 by the Germans with their early run of *blitzkrieg* (mechanized infiltration) victories in WWII.

Reformers looked to the past for clues on how to break the deadlock of the trenches. Sir B.H. Liddell-Hart found Commanders who used the operational art to find the enemy's center of cohesion and strike and destroy it by the "*indirect approach*" and thereby collapses his forces from within rather than seek to annihilate him through frontal attack attrition. War was seen as a contest of wills in a classical sense not as whose war machine could crank out the most men to be cannon fodder. These ideas are the foundation for modern AirLand battle and maneuver warfare doctrine in the U.S. military.⁸

Mechanization of Society equals TOTAL WAR 1914-1945

What the post-WWI reformers did not fully understand was that the Industrial age mechanized entire societies.⁹ This meant it was possible to literally arm every single citizen with a rifle, ammunition, grenades and field equipment. Railroads could deliver them to their death grounds by the thousands. Every living person in the country could be mobilized for war to produce these weapons of death, or TOTAL WAR. Thus, war may not be a contest between professional armies, but a sort of nation-state duel, but an ugly fight of national survival, extinction or triumph.

If you **mechanize your entire society for war**, you can set up a defense-in-depth in such a thickness that there may be no "*path of least resistance*" to take to infiltrate through and get at the enemy's "*center of gravity*". While landing on D-Day at Normandy was the **least** defended coast to land at, it was far from being undefended. 2-Dimensional siege engines in the form of British General Percy Hobart's "funnies"--special wall climbing, swimming and obstacle defeating tracked tanks were needed to overwhelm the enemy's defenses.¹⁰ Where there were no siege engines like at Omaha Beach; unshielded infantry was massacred by inter-locking enemy fire.¹¹ That the 2-D landings were not repulsed was owed to the 3-D Airborne landings that isolated the beaches from German counter-attacks and caused confusion

amongst the German commanders. The attack on D-Day's defended Normandy beaches are very similar to a successful stratagem for attacking a large city.

There may be no center of cohesion to strike and collapse an enemy, if the populace is cornered and being pushed back into its own lines of supply/communication. A good example was Germany at the end of 1944; when the 2-D path into Germany was bitterly resisted by a defense-in-depth from Germany arming of its citizens, the allies sought a 3-D movement by AIR to open the door to the enemy's industrial center at Arnhem bridge. Most people fail to understand this battle by seeing it primarily as a failure of the 2-D Armor reaching to the bridge held by the 3-D Airborne or a weakness on the part of the Airborne for having to need the link-up. The truth is that if we had held Arnhem Bridge, we would have only found ourselves halted on the other side of the river by the Germans who had a defense-in-depth. In other words, there was no opening in the enemy's center where we could maneuver freely and collapse him from within because the enemy was fully mobilized in total war footing. The opportunity was not there, we tried and we found this out. Is this then our failure?¹² No. Clever tactics--maneuverism--cannot always overcome a tactnotactical stalemate created by unshielded infantry trying to advance against increasingly automatic weapons fire, especially if there is a wall of enemy Soldiers arrayed in depth "fighting to the death" for their homeland. If Soldiers keep their heads and will not surrender even when their supply lines are cut, then maneuvering forces can have the tables turned and be isolated by the defenders.¹³ What we need is a means to overcome this resistance if there is no other choice.

U.S. Army reformer General William Depuy concluded: "**maneuver must be earned**" from his many battles in Europe in WWII.¹⁴ British General Sir Francis Tucker in *The Pattern of War* concluded that the German war machine failed because it placed too much faith in maneuverism. It did not have siege engines to defeat stubborn pockets of enemy resistance at the cities of Tobruk, Stalingrad and Bastogne that refused to surrender even when isolated. This undid German maneuver. The modern world moves by the AIR, and this Icarean battlefield must have 2-D siege engines to defeat enemies in cities once isolated by 3-D maneuver forces.¹⁵ Retired Army Lieutenant Colonel Ralph Peters writes about such devices in his *Military Review* masterpiece, "*Our Soldiers, their cities*".¹⁶ If these cities/enemy strong points are not defeated, enemy forces will operate in our rear areas and devastate our own cohesion. The problem of enemies in your rear is not to be taken lightly, as the [Russians are finding out in Chechnya](#). As the world urbanizes, we simply cannot ignore these defended cities.

Rejection of classical war forms in favor of nuclear posturing: 1945-1950

However, as WWII continued and casualties mounted from unshielded infantry advancing in the face of enemy automatic fire, pressure was brought to bear to find other ways to defeat the enemy. The idea was to use massive amounts of firepower without care of civilian casualties (total war). This was an attempt to save Soldiers from having to maneuver in close to get rid of the enemy in the "*death ground*" as Colonel Dan Bolger describes the close fight today.¹⁷ The idea of stand-off warfare of materiel' (send a bullet not a man) appealed to the Allies who had the industrial capacity to pour on an endless amount of ordnance against the Axis armies--their industries operating at maximum capacity safe from enemy attack behind two oceans of water. The ultimate expression of aircraft-delivered artillery is the atomic bomb, which caused the surrender of the final Japanese enemy in 1945 after two cities were leveled with just two bombs. At this point, the entire citizenry of Japan were armed and ready to fight to the last

woman and child. The planners for the ground invasion of Japan (*Operation Downfall*) estimated U.S. casualties would be as high as 1,000,000 men.¹⁸ Thus, when the U.S. atom-bombed Japan, we bluffed their leadership into surrender long before all their citizen's fight was gone.

Firepower displays are actually a form of **posturing**. The U.S. had only one more atomic bomb which to drop if Japan refused to surrender. The ground invasion would have had to continue with horrific casualties. But the posturing worked, and with it came the reorganization of the War Department into today's Department of Defense in 1947. **Although sound strategy in that time and place, it proved impossible to transfer this strategy to future conflicts.**

Realizing that the U.S. was caught unprepared for WWII, it was decided that being in a continual state of war would prevent the carnage of WWII. We did this by creating a highly visible force capable of demonstrations and other acts of posturing. In reality we had no intention of fighting a WWII-style ground war with unshielded infantry advancing against automatic weapons fire ever again. The atomic bomb would make such warfare unnecessary.¹⁹ The Air Force and the marines were given separate service status so we could have the posturing forces to "show the flag" and bluff enemies into maintaining the peace. The U.S. Army was demobilized and proven classical war forms discarded in favor of the advance of human technology in the form of unlimited nuclear (artillery) firepower.

The failure of air-based nuclear and sea-based posturing: Korean War 1950-1953

The calculating communist enemy called our nuclear bomb posturing bluff by invading South Korea with conventional ground forces in 1950. Although caught unprepared, we fortunately were able to fly in forces to just barely stop the North Koreans from over-running all of Korea. This bought valuable time for maneuverist General Douglas MacArthur who knew how to mass the remaining amphibious ships we had to cut off the enemy at Inchon and win the first part of the war. However, had South Korea been over-run it's likely the U.S. would have backed off and accepted the loss of this nation to communism, lacking the time needed to mass large amounts of ship-delivered infantry to reverse a situation already lost. Consider that this had already happened in 1949 when the Communists ran off the Nationalist Chinese to the island of Taiwan/Formosa.

Later on, the enemy, cunning and calculating realized that our war-forms were weak in infantry, and in inadequate numbers to control the non-vehicular traversable terrain. The peasant army of the Red Chinese, infiltrated non-linearly and counter-attacked, pushing UN forces all the way back to the South. Realizing we lacked the infantry to fight the enemy in the open, General Matthew Ridgway used firepower and terrain fortifications to re-establish a linear struggle and the border between the two countries was restored. All during this time, the U.S. supremacy in air and sea delivered explosives were incapable of deciding the issue; posturing had failed miserably. Later on, as Army Chief of Staff, General Ridgway courageously fought against the nuclear bomb firepower mentality:

Chief of Staff of the Army General Matthew Ridgway's dispute with President Eisenhower was over more than his nuclear deterrence policy called "New Look." It was with the force behind the policy that Ridgway had contention. He saw the downfalls of the culture of management science, and where its new bureaucratic trained officers would lead the nation. Ridgway, who had previously served as Commander of 8th Army Korea, was a gifted and brilliant leader who understood

unit cohesion and leadership. That is why Ridgway stated shortly after resigning as Chief of Staff, that one of his proudest legacies is that he protected the mavericks. Ridgway saw the blind faith in nuclear delivery systems as our first defense and security priority would create adverse conditions, situations, and circumstances when the Army would be forced to fight conventional wars.²⁰

As LTC David Grossman in his numerous studies, books on the psychology of war and killing has concluded there are only 4 actions one can take in war;²¹

- 1.) fight
- 2.) posture
- 3.) flee
- 4.) surrender

Our infantry had been trained to maneuver under complete air and artillery superiority. The idea of fighting enemy infantry on even terms in close combat had been ignored in our doctrine and training. As LTC. Grossman has shown in his studies, green and untrained infantry, fighting from cover, with a way out will run or surrender as soon as the enemy reaches or breaches the initial trench/defensive line. The spectacle of U.S. Soldiers and marines abandoning their positions and running for their lives, shocked many members of the press in Korea.

SLA Marshall's studies from WWII concluded that due to the danger from enemy fire, only 1 man out of every 4 ever fired his weapon, and even then it may have been posturing at the micro-level to appease peers.²² After U.S. geostrategic posturing at the macro-level failed in Korea, outnumbered U.S. marines and Army Soldiers when their ammunition ran out could only flee or surrender. The ground forces of the U.S. had failed to learn from their WWII experiences and restore a classical military war form for ground warfare so that it could be used without heavy casualties as a force of decision. We were still fighting WWII-style as if we had the total war backing of the U.S. population behind us with unlimited manpower. The infantryman as a "*bullet sponge*" was accepted as a fact of life, and only overcome by having another unit not pinned down by enemy fire advancing on the enemy to save the unit pinned down. But in Korea, the enemy forces easily defeated this tactic by vigorously attacking and breaking into the trench line of a company-sized unit. The unit would flee, exposing the adjacent units to attacks from their flanks and rear, causing them to flee also. The PLA and NKA were able to break down unit cohesion to such an extent that we had the spectacle of whole American Divisions abandoning their positions and running for their lives. We were incapable of fighting anywhere but near roads and this left our enemies with plenty of room to maneuver on foot, in the surrounding mountains.²³

We also did not have the manpower to have a follow-on echelon of men to treat the fallen and transport them to the rear and ammunition forward--Korean civilian porters were pressed into service toiling up/down the steep hills. Light planes and helicopters were pressed into service to save surrounded units with emergency ammunition resupply and bring wounded men back to life-saving medical care, but there were not enough.²⁴

Lieutenant General James Gavin writes about the lack of terrain-agile vehicle air cavalry war forms:

"Where was the cavalry? ...and I don't mean horses. I mean helicopters and light aircraft, to lift Soldiers armed with automatic weapons and hand-carried light anti-tank weapons, and also lightweight reconnaissance vehicles, mounting anti-tank weapons the equal or better than the Russian T-34s...If ever in the history of our armed forces there was a need for the cavalry arm-airlifted in light planes, helicopters and assault-type aircraft--this was it... Only by exploiting to the utmost the great potential of flight can we combine complete dispersion in the defense with the facility of rapidly massing for the counter-attack which today's and tomorrow's Army must possess"²⁵

No bluff for Vietnam: unshielded infantry losses shatters the will of the people at home: 1954-1975

A year after the end of the Korean war, the Asian communist enemies had surrounded the French at *Dien Bien Phu* and forced a surrender, realizing that western armies cannot accept the high casualties of unshielded infantry fighting an enemy equipped with automatic weapons. The French tried to fight the Viet Minh "even" in terms of tactotactical war forms (quality) but lost due to the populace being totally mobilized in a state of total guerrilla war (quantity). The maneuverist might conclude an attack that killed the communist leadership might succeed at collapsing the enemy's will, but making them into martyrs may only increase the will of the people to resist. The French use of 3-D Airborne maneuver to allow their smaller forces to ambush the larger enemy was successful except that once on the ground, French Paratroopers were fighting the enemy even, unshielded and on foot in close combat. There were never enough French ground forces and the enemy exploited this further by diluting them by multiple attacks across the countryside while they massed at the decisive point.²⁶ The French learned from their Indo-China experiences and succeeded in Algeria using the world's first 3-D helicopter mobile infantry/cavalry to defeat a lesser guerrilla force that had not gained a total war commitment from the populace.

The American Army led by visionaries like General Gavin realized the world moves by the AIR and advocated that infantry moved by aircraft, have their own shields/siege engines in the form of armored tracked fighting vehicles. We were unable to overcome institutionalized complacency with WWII 2-D war forms and get such an Air-Mechanized force fielded to a decisive degree.²⁷ Vietnam 3-D Air Assault doctrine without the armored shield/siege engine of a parachute and helicopter-deliverable AFV considered that infantry on foot would not be orphaned after delivery because helicopters would be overhead or nearby. Practical experience showed this was not the case. So while American infantry could be flown in and flown out (unlike the French in Vietnam, but like they did in Algeria), Americans fought an enemy defending in depth. The Vietnamese were not easily collapsed by destroying a cohesion center, and when the Americans were away from their helicopters and on foot, fought the enemy even or at a disadvantage, unshielded against enemy automatic weapons fire.²⁸ As losses mounted, the enemy used imagery and words to express the futility of the conflict directly to the people of America (4th Generation war) which gave up on the war in 1973. Two years later, despite U.S. air and sea supremacy, the North Vietnamese Army marched into South Vietnam because America was unwilling and unable to deploy decisive, superior ground forces to stop them and **total American air and naval dominance couldn't change the outcome.**

Unreality: return to Cold War posturing; 1975-1981

Vietnam's clear lesson that America needed an air-delivered Army ground force of decision capable of dominance without heavy casualties was ignored and placed in the "too hard to do" box. Ground combat was seen as too costly, so what America would do was to use U.S. Army ground forces at world hot spots like Korea and Germany as "*trip-wires*". These insure the enemy knows G.I.s would get bloodied and force the American Congress to defend them and not cut our losses and run as it had in South Vietnam. We even outfitted them with the "BIG 5" ground weapons systems (70-ton M1 tank, 33-ton *Bradley Fighting Vehicle*, 3-ton HMMWV 4x4 truck, *Apache* and *Blackhawk* helicopters) so they would survive as long as possible in a fight. Short of that the Soviets were forced into a spending arms race that would bankrupt them economically and expose their morally bankrupt system of government. Billions would be spent on air and sea aircraft means to pummel the enemy from safe stand-off ranges. The marines would loudly sail in circles around the world ready to evacuate U.S. citizens from nations torn by Soviet-sponsored wars and collapses of order. With the Soviets, who are really Westerners with a materialistic worldview, the Cold war "bluff" worked. The real cost for America was when we really needed a functional shielded force in more reasonable and deployable weights/sizes. There wasn't allegedly enough money to properly equip the Airborne/Light forces stuck doing the "dirty work" of keeping the world free of communist thugs/villains with state-of-the-art light AFVs.²⁹

The age of the lightfighter: 1981-1993

But in areas where Jane's Defense Review is not read as a source of reality, freedom's enemies look at the "bottom lines" of what can be delivered to the fight within the hours after they try to gobble up their neighbor or perform their coup.

With Reagen/Bush as Presidents, unshielded U.S. Army Airborne/Light forces were rapidly air deployed to win Small Scale Contingencies in [Grenada](#), Honduras, [Panama](#), Haiti with light casualties due to a revival of classical military operational art, careful battle selection and just enough air-delivered armored fighting vehicles to act as shields/siege engines. This renaissance of lightfighter maneuverism ended October 3, 1993 when unshielded Army Ranger infantry on a leadership capture mission (an attempt to destroy a source of enemy cohesion) was surrounded in Mogadishu after two escort helicopters were shot down by massed enemy Rocket Propelled Grenade (RPG) and automatic weapons fire. Their soft-skin HMMWV trucks were riddled with bullets and their soft rubber tires flattened and set on fire, grinding them to a halt on their rims. This resulted in 18 dead Americans. Mogadishu was a city fight where the infantry lacked AFVs to be shields or siege engines and the result was casualties from undeterred enemy fire and a reversal of U.S. ground force policy.³⁰

1993-1999 the heavy peacekeeper and the Kosovo failure

Not to be deterred, the U.S. Army in Somalia began to deploy peacekeepers with heavy M1/M2 AFVs to mitigate against the threat of being unshielded, later deployment success in Bosnia led some to assume that USAF aircraft could airland these heavy AFVs and it wasn't necessary to equip Airborne/Light forces with lighter air-deployable-in-large-numbers AFVs, so the superb M8 Armored Gun System was cancelled instead of replacing the trusty but worn-out M551 *Sheridans*. However, as the months wore on into years, the 33-ton BFV and 70-ton M1 proved too heavy for third world country road nets and peacekeepers were supplied with 4x4 HMMWV trucks, some better armored than the HMMWVs in Somalia, but essentially at

risk.³¹ When Serbian forces began to terrorize ethnic Albanians in Kosovo, the U.S. heavy forces were simply too heavy to deploy in a timely manner, resulting in an [extended air campaign](#) which gave the enemy a free hand to do what he wanted as we were powerless from 15,000 feet to control the ground below. Once NATO forces were ready to launch a ground war, pressure from Russia forced the Serbs to withdraw and U.S. heavy peacekeepers moved in slowly while their lighter British counterparts "Air-Meched" themselves and their vehicles by helicopters and fixed-wing aircraft. The Russian Airborne beat NATO to Pristina airport and everyone had "egg on their faces". Once in Kosovo, U.S. peacekeepers found their heavy AFVs were once again too heavy and Army leadership decided it was time to transform selected Brigades to "Medium" (about 20-tons) weight air-transportable vehicles in order to rapidly respond to crisis's like Kosovo. However, "Medium"-only vehicle forces without heavy AFVs are too light for a prolonged or difficult close cityfights, yet are too heavy to fly by Army helicopters to gain 3D positional advantage to surround/isolate and collapse a foe. Wheeled armored cars of any weight are vulnerable to all types of enemy fire and cannot negotiate obstacles in a city fight, thus we need more compact, weight-efficient tracked AFVs to dominate the cityfight by 2D and 3D maneuver.³²

Urban Mechanization of Geography: enemies shielded

The fact that the world is rapidly urbanizing is evident to anyone looking down from an aircraft. That the destruction of natural vegetation and terrain is harmful to the ecological balance required to sustain the life forms on the earth is also self-evident. Fortunately, people require food grown off the land and this will mean that there will be farm areas which 3D air-delivered forces can enter a battlefield by parachute and/or airlanding. In closed terrains, rappel, fast rope and winching down vehicles will be required. Rural maneuver is something American military forces understand and welcome. Standard thinking is that fighting in cities is to be avoided as people live in cities and our goal is to defeat the enemy army in these rural areas.

This has changed; people cause wars and people live in cities. With total war or intermingled war via guerrilla war, ***fighting in cities cannot be avoided!*** The conflict emanates from the city. We might be able to defeat the nation-state's army in a rural setting, but what if he chooses to strong point in a city, using the buildings and the civilians there as a tactical and geopolitical shield? In other words, what if the enemy refuses to fight wars as a sort of personal *mano-e-mano* duel in the rural open like the western mind enjoys?³³ Winning at ANY cost may be the mantra of the asymmetric foe looking to pit his strength against our weakness. The Russians in WWII were able to break the back of the German Armies by defending their cities. The German Army was superior to the Soviet Army in the eyes of many authors, but as the Germans discovered, if you are not prepared for them, cities can become "*meat grinders*" where quantity swallows quality.

All of the great military Commanders and victorious armies of the past have had to have siege engines to quickly take down defended areas and minimize losses--maneuver alone could not by itself subdue all enemies. Alexander had to use siege engines to defeat Tyre/Sidon, Caesar, the Romans at Masada, even Genghis Khan; probably the greatest maneuverist of all time--used siege engines and engineers extensively. Yet today, we have lost sight of this war form because we have over-relied on firepower to do all our work, and often this only creates more rubble which defenders can use as cover as we found at Monte Cassino in Italy in WWII.

Computerization of Societies: enemies situationally aware

The belief that man is progressing in "waves" as the Tofflers have outlined has created a de-emphasis of physical mechanical advantage. They have been dated chronologically in the Industrial "2d Wave" of civilization in favor of electronic gadgetry which came later in time in the so-called "3d Wave" of civilization.³⁴ These military and civilian theorists devoid of a classical military education and understanding of the enduring nature of basic war forms have discarded mechanical advantage in favor of mental means as a solution to all battlefield problems because they think its "newer" and thus better. The result is a force stuck in a minefield with a computer is still stuck in a minefield. By dating and creating a snobby *avante garde*-is-better attitude towards the physical reality we live in, we overlook the best possible combination of all ingredients to create a decisive ground force.

But do not be surprised if the enemy uses computers and cell phones to mass and synchronize his actions in the cityfight to "bloody our nose" constantly. In the future, don't be stunned to see neatly organized computer vans, turned into slaughterhouses by men who understand simple mechanical advantage. Often, all he has to do is inflict enough casualties so that the world-wide media can convince the people at home to give up the fight.

The fatal future of Robo-posturing: 2000-future

By not understanding that the real purpose of military force is to **change human governments or protect them**, many see war as merely killing and thus delivering destructive explosives onto the enemy's military forces. So they reason, if we can do this without risking men, why not just use robot aircraft and robot ground vehicles? In the 2000 Budget, the U.S. Congress has directed that by 2015 one-third of all U.S. forces will be robotic.³⁵ America will then fight wars from a safe-push-button stand-off and not endanger her men, not realizing the enemy if he IS willing to put his men on the ground, and willing to accept casualties that this negates our firepower; he will have the decisive advantage. It will be the fall of South Vietnam all over again. We will be trumped on the ground because we were unwilling to risk our men there. People live on the ground, not in the sea or in the air. If we want to control them and their governments we must put our own "boots-on-the-ground". This includes siege engines and shielded infantry.

If we can't do this without heavy casualties, its our own fault and incompetence. Its our failure in the military profession to offer a decisive ground force that can win without heavy casualties that would come from a better understanding of our profession via classical military understanding. It's limited military options that lead civilian policy makers to such potentially geostrategically fatal courses of action as robowar. ***Is this an acceptable change?***

Once robowar, delivering stand-off munitions fails in a geostrategic challenge to the U.S., the entire world could become aware of this weakness. World order could become unglued as its realized that America is a posturing, paper and computer "e-tiger" that will not put forces on the ground to stop those **that are** willing to die for what they want. Colonel Bolger warns us in his book *Death ground: U.S. infantry in action*:

"The most serious peril in this increasingly elite, decreasingly numerous American infantry equation involves the one factor we can never control: the enemy. Our potential foes do not have big air forces or decent navies. But they definitely have sizable armies. Many states employ able infantry in large numbers, backed by lots of artillery, tanks and the like. They do not have to worry about transoceanic deployment or sending bullets instead of men. They just have to concern themselves with winning, and the blood debt for victory may not be an issue."

Against this, the United States poses firepower technology steered by a few good men on the ground. That can become a dicey business. Special operations promise big payoffs for small investments, but these raids and reconnoiterings hinge greatly on stealth, surprise, and speed. When caught in flagrante delicto, special warriors can do down hard. Historically, about half of direct action missions fail. Perhaps new technology will improve that .500 batting average. But with no larger body of ground-gaining Soldiery to remedy botched attempts, the United States cannot afford many strikeouts. And there will be striketouts. Look at Mogadishu.

Numbers offer the only hedge when the hostiles do not crack under bombardment, the direct action raid miscarries, or the SOF-model stay-behinds get overrun. With the bad guys belt-to-belt, somebody will have to take and hold ground. Airplanes cannot do that. Shells and bombs cannot do that. Only grunts can do that. And the fewer men we have; the less we can do that.

For those enamored of the Khafji example, consider a cautionary tale. During the war in Southeast Asia, the United States sent its best special operators into Laos and Cambodia as part of the innocuously titled Military Assistance Command Vietnam--Studies and Observations Group (MACV-SOG). Acting as tiny infestation teams, the most select men in the American military crossed the borders and brought down the thunder. For the cost of 300 superb Americans, MACV-SOG inflicted 45,000 North Vietnamese deaths, the highest kill ratio in a war characterized by body counting. Additionally, MACV-SOG destroyed thousands of tons of enemy supplies, wrecked stretches of the Ho Chi Minh Trail, and provided priceless early warning for conventional U.S. units. Of course, the Vietnamese Communists won the war anyway.

You see, unlike the Iraqis much like Muhammed Farah's Somali supporters, the North Vietnamese did not fear death ground. They did not buckle under bombs or rockets, although the United States rained these down in horrendous amounts. In the words of Maj. Gen. Robert H. Scales Jr., who served as an artillery observer at Hamburger Hill in 1969: 'Every day I watched as aircraft dropped hundreds of bombs on top of that hill, and every night the North Vietnamese cooking fires would come on.' That's the real danger of not enough infantry, no matter how good and no matter what the firepower on tap. Against a lot of solid enemy armies, it's necessary to go forth into death ground at bayonet point and kill the other guy, face to face. It is the ultimate sanction of dangerous men.³⁶

Time to discard posturing for functional, decisive U.S. Army Air-Mech-Strike ground forces

The Cold War with the Soviet Union is over, posturing to create an arms spending race will not work with the less-materialistic, far east Asian mindset of the Red Chinese. The Red Chinese are not impressed with small amounts of infantry in ships that will take too long to load and sail to stop them from gobbling up a neighbor. Ships loaded by the thousands with "red-blooded" American boys do not deter them. They can be easily targeted by their wakes from space, sunk by floods of cheap anti-ship missiles guided by U.S. GPS satellites, or coastal mines.³⁷ This will provide convenient body-bag imagery for CNN to shatter the will of the American people to give up the fight. If America cannot get to the fight, she will surely cut her losses and run after the posturing fails. LTC Richard Hooker Jr. writes:

"..the problem is that there are few opportunities to conduct large-scale amphibious landings...On the rare occasion when an amphibious assault becomes a true operational option, such as in the Gulf war, the combination of modern technology such as Silkworm and

Exocet missiles and primitive technology (such as high density floating mines) make major amphibious operations exceedingly dangerous.."

Real deterrence comes from forces that can actually get there in time to fight and win--not just go through the motions and posture. Forces must be able to get to the fight and not be denied access, and once there win without heavy casualties so the effort is not undermined by 4th Generation warfare direct attacks on the will of the people at home. This also includes homeland defense from Weapons of Mass Destruction (WMD) and terrorism. The day of the surface ship packed with marines traveling at 20 mph trying to cross thousands of miles of oceans is one missile away from being over forever. We can no longer waste billions on obsolete marine forces wanting to be a land-locked second land army even if they are posturing with platitudes of how they will cityfight infantry-pure with "3 block war" rhetoric. Ship-based infantry cannot even get to the fight, and even if they could in adequate force size or timing (doubtful) their heavy casualties from platitudes not backed up by siege engines would shatter the will of the American people. Platitudes not backed up by siege engines will only create opportunities to build monuments like the one being built for the 19 that died when their troubled V-22 crashed recently in Arizona. A better memorial would be to stop wasting money on 172,000 posturing, phony marines, while only a small number are actually afloat in a handful of expensive surface ships and gadget planes. Let's divert resources to Wing-In-Ground (WIG) effect aircraft that leave no water wake visible from space, that can deliver large quantities of real U.S. Army war-winning ground forces in hours, to win conflicts not just "*saber rattle*". America's enemies will not be deterred by BILLIONS spent on tilt-rotor helicopters that can deliver a mere squad of unshielded men with hand weapons, whose only purpose is to evacuate citizens so America can "*cut and run*". We need to think very carefully about spending \$1,300,000,000 (\$1.3 billion) for sixteen aircraft that can only hold sixteen lightly-armed marines in an aircraft (256 marine combatants total).³⁸ The chances of using something as expensive as the V-22 tilt rotor aircraft in war, a highly destructive activity, is slight. The only possible reason for purchasing something this expensive and yet limited is missions other than war (posturing and evacuating).

America's Army needs a [Future Transport Rotorcraft](#) (FTR) that can self-deploy from Continental United States (CONUS) adequately sized so to deliver large quantities of shielded infantry and Armored **Fighting** Vehicles to act as moving shields and siege engines, employing digital means to maximize combined-arms situational awareness and firepower effects. This will create 3D maneuver capable forces that use Air-Mech-Strike (AMS) to isolate and cut-off urban areas in the city fight, but cleverly leaving a means of escape so the enemy will throw down his weapons and take the psychological course of action of fleeing once American troops have breached his positions and/or in his rear.

" To a surrounded enemy you must leave a way to escape."

--Sun Tzu, *The Art Of War*

Ho Yen-hsi, Chinese military commentator from the Sung Dynasty added these

comments in one early translation.

"When Ts'ao Ts'ao surrounded Hu Kuan he issued an order: 'When the city is taken, the defenders will be buried.' For month after month the city did not fall. Ts'ao Jen said: ' When a city is surrounded it is essential to show the besieged that there is a way to survival. Now, sir,

as you have told them they must fight to the death everyone will fight to save his own skin. The city is strong and has a plentiful supply of food. If we attack them many officers and men will be wounded. If we persevere in this it will take many days. To encamp under the walls of a strong city and attack rebels determined to fight to the death is not a good plan! Ts'ao Ts'ao followed this advice, and the city submitted."³⁹

The Russians have made it clear in decrees and actions that no insurgent in Chechnya shall survive. Men with no choice may not win, but they will fight.

If the enemy is weak and has a center of gravity to be captured or destroyed, maneuverism can be employed to collapse the enemy well described by General David Grange's [Air-Mech Strike: Asymmetric Maneuver Warfare for the 21st century](#). But the full solution to the problem of cityfights requires the full development of 2D war forms such that they can win if the enemy is in a defense-in-depth not subject to collapse and without heavy casualties: a surgical siege capability and shielded infantry. This means real expenditures on the AFV siege engines required and the WIG aircraft to deliver them and their shock troops, not slogans like "3-block war". These funds will come if we dismantle our phony sea-based posturing forces and get serious about air-delivered ground warfighting ability to create real geostrategic deterrence.

2D City-fight capable *Phalanx*: surgical siege engines and shielded infantry

Once we have isolated our target areas, we need to be able to rapidly punch through enemy defenses to reach the center of gravities (**surgical siege capability**) which will surely be heavily defended. This has to be a viable 2D maneuver force option, otherwise we over-depend on the 3D Air-Mech-Strike maneuver force to reach the center of gravity by vertical envelopment. Both 2D and 3D elements must be viable as the focus of main effort depending on the situation. If the enemy is not subject to maneuverism and collapse, then we need a **general siege capability** that is dominant to such a degree that the enemy can be worn down to defeat over time without heavy friendly casualties. Once the enemy sees the futility of the struggle, he may collapse from desertions if we leave a way of escape or completely surrender, but if we are not able to slug it out and dominate him, why should he give up?

Surgical Siege Engine AFVs

Unshielded human flesh against automatic weapons fire from enemies shielded in machine-made buildings is madness. WIG aircraft will deliver the 2D force heavy AFVs required to be cityfight siege engines, as the 3D forces' lighter AMS AFVs would be parachute airdropped and airlanded by USAF fixed-wing and Army rotorcraft into positions of advantage. These siege engines would be machines that dominate a city fight against buildings that have been made by machines. These would be track-laying AFVs with:

1. **Battering rams** to break open access holes in buildings for infantry
2. **Vertical assault ladders/hydraulic boom capsules** to deliver assault infantry to selected floors of buildings
3. **Non-lethal weapon crowd control vehicles**
4. **Capture wagons** to snatch enemy leaders

5. **Firefighting vehicles** so city doesn't burn down we are trying to save (Remember the SLA shoot out, assault on MOVE in Philadelphia, Waco?)

6. Full-trauma ambulance vehicles

7. **PsyWar media vehicles** to communicate to the populace how to evade and surrender without injury

8. **Super SP Assault Guns** armored from rooftop attack with powerful anti-building cannons; this would be a 155mm howitzer on a tank chassis with a fixed turret. These assault guns would be able to super-elevate to shoot at the upper stories of buildings which a tank with a limited elevation capability will never be able to do. These will be capable of indirect fire to clear and penetrate through rooftops. The Israelis found out about these limits in Beirut. These SP assault guns could fulfill MOUT missions much better than a tank. The Russian experience (and everyone else's) with tanks in cities is not very promising. But if push comes to shove its better to have an M-1 than nothing.

9. **Heavy mortars** (120mm and above). Mortars have great history as indirect fire weapons in cities. The steep angle of fire allows the rounds to hit in streets with tall buildings on both sides. The devastation they created in Sarajevo, Grozny and Beirut was much better than other indirect fire methods like howitzers and rockets. Smooth-bore mortars are cheap, easy to set up and if heavy enough, destructive in the extreme. Most importantly, they can deliver this on city streets with no danger of being shot down like an aircraft. Things might have been very different in Mogadishu if the Rangers had a nine-tube battery in support of their operations. Unlike helicopters, they are impervious to massed RPGs.

10. Tube launched Fuel Air Explosives (FAE). They must be small enough to be fired by one man. A FAE warhead on the HMMWV-launched EFOGM top-attack missile should be fielded as the precision guided munitions (PGM) for MOUT, not aircraft delivered PGMs. These will create sufficient overpressure to destroy dug in and shielded troops.

The test-bed unit for this 2D Cityfight *Phalanx* should be the 3d Brigade of the 3d Infantry Division at Fort Benning, Georgia co-located with the Army's urban fighting 75th Ranger Regiment. "*The Rock of the Marne*" would integrate infantry, M1/M2 AFVs with the specialty siege engine AFVs to create a battle-winning cityfight *phalanx* that trains alongside with the Rangers for a high degree of readiness. Waiting to transport them would be a Squadron of giant Army WIG seaplanes at Savannah, Georgia near Fort Stewart, to take them to the fight anywhere in the world.

MOUT Assault Group (MAG)

This 2D "battering ram" element should be initially composed (until specialty siege engine AFVs are fielded) of Combat Engineers with a M1 roller tank, M113A3s/MICLICs and a M88 recovery vehicle to smash the wire (Combat Engineer Assault Groups--CEGs). These would be followed by task organized Infantry MOUT Assault Groups (MAGs) with a M1 *Abrams* tank, a BFV and a M113A3. This force would MECHANICALLY breach the wire/mines not sit there exposed to enemy fire, hand cutting wire or emplacing bangalore torpedoes, except as last resort.

Entire MAG moves along street center to avoid building windows where satchel charges could

be dropped. Storms into city protected by armor.

1. M1 tank with sandbags on top to protect against massed RPGs (not simulated effectively by MILES Vipers at JRTC)

*Building/room clearing 120mm gun shock action

*Breech hole creation for infantry to enter buildings

2. BFV with top sand bags

* 64 degree high angle 25mm/7.62mm suppressive fires; breech hole with continuous fires

*Dismount infantry with body armor/gunshields for close-in protection

*Expedient tank-infantry phone using H-251 or ACAP/CAPS headset or extra radio handset through firing port hole connected to J-box of vehicle intercom to communicate directly to crews wearing CVCs

3. M113A3 with sand bags

*Infantry with body armor and gunshields faces outboard for 360 security

* .50 cal HMG should be behind gunshield kit

* Infantry can use M113A3 to enter buildings from 2d floor using top troop cargo hatch

*Expedient tank-infantry phone using H-251 headset or extra radio handset through top cargo hatch connected to J-box of vehicle intercom to communicate directly to crews wearing CVCs on where to fire the .50 cal HMG to kill/suppress/targets

4. Dismounted infantry following close behind tracks of last vehicle, the M113A3, wearing body armor and gunshields

MOUT Assault Group TTP

Upper floor Entry

1. M1 Abrams and/or Team BOF element suppresses building

2. MAG drives to designated building side;

a. M1 "noses in" to create triangular protected space

b. M2 follows behind suppresses upper floors with high-angle fire; engine smoke turned on or smoke grenades thrown

c. M113A3 enters in protected space; troops enter building from 2d floor using the vehicle roofs or detaching assault ladders

3. Assault infantry clears building/marks secure, leaves team behind to prevent re-occupation by enemy
4. Dismount infantry "re-load" M113A3 for next building assault

Bottom floor entry

1. M1 Abrams and/or BOF element suppresses building
2. MAG explodes a breach hole by tank, BFV, or satchel charge
3. M113A3 drives nose-on to breach hole, smoke grenades thrown, troops leave rear ramp, enter building/clear/leave team inside to occupy
4. Dismount infantry "re-load" M113A3 for next building assault

Return of Shielded Infantry, YES

When U.S. Army Rangers and SFOD-Delta troops were pinned down by enemy fire from superior numbers of enemy with automatic weapons and RPGs in Mogadishu their only "shield" was their own fire to keep the mobs away. Soon they were running low on ammunition. Soldiers protecting a helicopter crash site run out of ammunition were over-run, later being awarded the Medal of Honor for saving the life of the downed *Blackhawk* pilot there. Everywhere else, Soldiers returning fire were hit as they peer out from cover to keep their shielding fire up.⁴⁰ Several are hit as they expose themselves to shield their brothers from the enemy. Eighteen men die and many are maimed in this firefight fiercer than any since Vietnam.

Accounts of Israeli Defense Force Paratroopers fighting against automatic weapons fire in southern Lebanon "Close-range Fire Surprised Paratroop Commandos" from February 24th, 1999 echo this reality:

"A force of over 20 Paratroop commandos that crossed over the security zone on Monday were ambushed by three Hizbulah terrorists. Three officers were killed in the ensuing battle, and five Soldiers were wounded. The Hizbulah terrorists managed to escape. As reported by ISRAELWIRE, the three killed are: Major Eitan Balahsan, 30, the commander of the Commando Paratroops unit, Lt. Liraz Tito, 21, Engineering Corp officer, and Lt. David Granit, 22. After midnight Sunday night, the Paratroop commandos moved north of the "Red Line" in the Jabel Kalat Jabor area in the eastern sector of southern Lebanon. Their goal was to hit the Hizbulah terrorists as they left their village bases. The force, under Balahsan's command, underwent lengthy preparation for the action, and were personally grilled by the Northern Command commander, Gabi Ashkenazi. Lt. Tito, an officer in the Engineering Corp, joined the force in order to disarm any bombs that might be found in the area. The Soldiers began towards their target area, moving slowly over difficult, rocky terrain. Upon reaching a slope, Major Balahsan divided the force into two groups. He commanded over the group that set-out first."

As the Soldiers moved forward, they were surprised by heavy volleys of close-range fire. Three Hizbulah terrorists had set up an ambush and began firing as soon as they saw the IDF Soldiers. Balahsan and Tito, who were at the head of the force, were

immediately fatally wounded. Their fellow Soldiers began returning fire, and attempted to help the wounded officers. In the battle, which included automatic gun-fire and hand grenades, five more Soldiers were wounded, mostly from grenade fragments. Lt. David Granit commanded over extrication of the wounded and charged the Hizbulah terrorists, but was shot and killed. The Commander of the Paratroops Brigade, Colonel Gershon Yitzchak, stated that the Paratroops commandos acted professionally and coolly in the face of the terrorist ambush.

The battle lasted 15 minutes, but the Hizbulah continued to bomb the area, making extrication of the dead and wounded difficult. The IDF responded with artillery fire, fighter planes and helicopters. The wounded Soldiers were taken by helicopter under heavy fire to hospitals in Israel. Afterwards the remaining, unharmed Soldiers were taken from the area by helicopter.

Hizbulah heads reported Tuesday that the IDF Soldiers left behind weapons, and displayed weapons and bloody uniforms that they claimed were from the battle area. They said that they knew an hour ahead that the IDF force would be entering their area".⁴¹

The reality of today's increasingly urbanized battlefield is that heavily defended, high-value targets are going to be covered by enemy fire. Units that are to spearhead other units need both [shock action](#) and armor protection to prevail without heavy casualties. While rifle-caliber resistant Ranger Body Armor (RBA) saved many lives in Mogadishu, it did not armor protect enough to enable Rangers/Delta Soldiers to move in the face of enemy fire, so allied Army light Armored Fighting Vehicles ([AFVs](#)) had to be brought in to extract Task Force Ranger.



Studying the October 3, 1993 Somalia firefight and the many battles of WWII, Korea, Vietnam and recent battles its painfully clear that men advancing against enemy automatic weapons fire need more than S.L.A Marshall's fire & maneuver tactics. We have known this for decades; for a vivid description of the effects of enemy automatic weapons fire, read the accounts of young "Sky Trooper" PFC Jack Smith during the battle at LZ X-Ray during the first major American battle of the Vietnam war in 1965.⁴² The American public and even the world seeing the film which makes these truths painfully evident, "[Saving Private Ryan](#)" should be under no illusions about how being "macho" is going to overcome bullets.

Here is the gunshield made thanks to the cooperation and hard work of the SIMULA company!



For more details on gunshields than the brief summary here:

[Gunshield web Page](#)

Yet, we have had the technology to place a hand-carried shield capable of deflecting automatic weapons fire on the end of our rifles and machine guns for the last 3 decades but have instead let these fires cut up, maim and kill our men in numerous firefights. Infantry often have to leave their AFVs ahead of the target area for security and stealth functions, they cannot be unshielded when doing these functions. A 11" by 14" gunshield that attaches to the end of the M16A2 rifle/M4 carbine via the bayonet lugs and other quick-release mounting hardware would deflect bullets away from the body. We might put the gunshield farther back, perhaps just forward of the magazine. Especially if operating without a bipod, it would help balance the weapon and improve visibility (small aperture close up equals large aperture far away). Note the photo of the bazooka where the shield is right up to the sight near the guy's face.

This gunshield would allow us to regain fire superiority and not be pinned down by enemy fire. Throughout history the most effective way to stop missiles is with a SHIELD away from the human body. Trying to stop them at the chest is unsound and letting bullets get too close in the first place. A shield would protect the arms and exposed areas of the face that are now sacrificed with the body armor on the torso approach.

There are many plates of armor that fit into the front pockets of Interceptor-type body armor that could be made into a gunshield that have Level III protection and weighs approximately 4-5 lbs. that can stand alone against 7.62mm FMJ 158 grain M80 Ball round (.308 Winchester) with minimum velocity of 2750 fps. There are clear hand shields in use by police officers. If there is a WILL, there is a WAY. A small number of gunshields tested at combat cities using simmunition, paintballs and laser simulators would prove the concept. The potential lives saved, battles won possible by this advantage would result in mass production for the U.S. military.



During the height of the Vietnam war, General Dynamics engineers, 30 years ago examined the gunshield concept for application to the already-heavy M14 rifle.⁴³ A ceramic armor shield similar to that available to helicopter crews ("chickenplate") was affixed around the front of the rifle bipod (the M14 had a bipod that could be clipped on just under the gas tube). The armor plates were configured in different sizes and shapes, with the average being about 14 x 12 inches and about 3 pounds in weight. The results of the trials were as follows:

Defensive Operations

- restricted field of view around the gunshield (we can resolve this using new transparent armor composites that weren't available back then)
- gunshield made the weapon harder to reposition within an already tight defensive position (make it detachable)
- gunshield did give the Soldier an added sense of security in a hasty fighting position
- added weight and mass of the gunshield tremendously increases the stability and accuracy of the weapon

Offensive Operations

- gunshield adds too much weight to the weapon, and is of little value when executing 3-second rushes (a gunshield protects the torso just as much as a plate at the chest on body armor).
- gunshield makes the weapon harder to handle when "*shooting from the hip*" (solved with a foregrip)
- added weight and mass of the gunshield tremendously increases the stability and accuracy of the weapon

Universally, combat troops (Vietnam Era) thought that **although the concept had merit**, it was not practical to increase the Soldier's burden to accept the added protection that a personal gunshield afforded. The decision was made, instead, to invest in improving personal

body armor as the solution to increasing the ballistic protection of ground troops, even though this is the least efficient way to stop bullets/shrapnel. Adding dead weight at the chest is the same burden as weight on the rifle, and is worse since this weight also blocks cooling. It works better to DEFLECT bullets AWAY from the body in the first place. We add 3-7 pound night vision devices to the rifle now. What do these do for the Soldier during the daytime during 3-5 second rushes? DEAD WEIGHT. Surely, we can add 3 pounds to deflect bullets and PREVENT bodily injury in the first place.

We have a lighter M16/M4 5.56mm rifle/carbine than the heavy M14 now, more advanced materials and are out of the "*Jungle Fighting*" mentality, that the concept can be perfected to save lives today.



However, the majority of today's DOD investment, remains with body armor and not personal shields which is a mistake. It is a lot easier for a trooper to lay down a shield and stop bullets away from his body than it is for him to survive fire at his body armor. The U.S. Army Research Laboratory (ARL) is researching advanced clear ceramics like ALON that could be used for a gunshield, but we have to have a vision of shielded infantry (not fatalistic bullet sponges) to get us utilizing the advanced technology we have to the fullest. IF THERE IS A WILL THERE IS A WAY. Just as the bayonet attached to the rifle replaced the pike, the gunshield attached to the rifle/carbine will supplant the separate plate on body armor; in fact they can be interchangeable. A 21st century shielded infantry phalanx can advance in the face of enemy fire, even if cover/concealment is lacking. With volunteer forces, U.S. infantry is without a follow-on echelon of men to evacuate/care for wounded men and cannot afford to lose momentum in the attack by giving buddy aid to the fallen which often results in being pinned down and surrounded nor use up precious ammo in the defense to keep enemies at a distance--prevention is the best cure. [Human Powered Vehicles](#) (HPVs) like all-terrain bikes/[carts](#) can help shuttle ammo in and wounded men out more efficiently and with less manpower, but to prevail in battle infantry must be shielded. to continue to advance.

No more being out-gunned by RPG explosive weapons effects in the close fight!

A sad corollary to the men-against-fire, "*bullet sponge*" paradigm is that we over-rely on small arms fire to suppress the enemy who often uses explosive weapons effects from RPGs and rockets, resulting in U.S. forces being out-gunned in the close fight on foot. Because U.S. rockets are disposable (not in arms room as a weapon that must be qualified with annually), their importance in training and small unit tactical development gets ignored.⁴⁴ The AT4 by being large and bulky, is difficult to employ and in a raging firefight is difficult to stop, put your rifle down, pick up the AT4, arm it, open its sights then fire it. What we need is a quick explosives weapon effect that attaches instantly to the Soldier's rifle--the rifle grenade. **Rifle grenades** can be dual use hand or rifle launched, so one munition does the job of two. Rifle grenades can be trained on using blanks to attain a HIGH level of accuracy and are far more powerful than the palm-sized minuscule 40mm M203 grenade which is only available through a few designated Grenadiers in the rifle squad. In the cityfight, EVERY SOLDIER HAS TO BE ABLE TO DOMINATE THE FIGHT WITH EXPLOSIVES WEAPONS EFFECTS. The new Objective Individual Combat Weapon (OICW) with a "smart" 20mm grenade acknowledges this but achieves the capability at too much cost/complexity. We need an answer that can be fielded with troops TODAY. A state of the art rifle/hand grenade launched by regular rifle ammunition

and annually tested for individual Soldier qualification using blanks is the solution to regain dominance in the close fight from the dreaded RPG.

Field the M8 Armored Gun System with shoot-on-the-move 105mm gun so the Army's Airborne, Light and Air Assault Divisions will have an air-deliverable tank and building killing over-matching weapon system that can accompany them during their forced-entry and contingency operations as outlined in Grange's *Air-Mech-Strike: Asymmetric Maneuver Warfare* book.

C4I and centralized immobility: command structure in MOUT.

It would be folly to think that we can Command, Control, Communications, Computerize and Intelligence (C4I) the battle for the city with our present doctrine of top-down command with little or no input from the troops. All the technical and training innovation possible will be wasted with a rigid and centralized command. MOUT moves much too fast and with little reliable information for the typical American command structure. In the disaster in Mogadishu, the incredible number of Soldiers involved in C4I far outnumbered the troops on the ground, but could do nothing to influence the battle. How could any Commander lead by personal example if he spends most of his time communicating with the Command and Control helicopters flying over the battle? What was the value of having a live feed to the Pentagon?

We must organize, equip and train units to operate at the lowest levels without over-limiting guidance from above--these must be sturdy, resilient units with shields and siege engines that are as self-sufficient as possible. All leaders must understand the mission and be given the autonomy to accomplish the mission as they see fit with spans of control which allow alternative courses of action. If there are helicopters sitting nearby unused and if the junior Commander requests them for a supporting Air Assault into an undefended soccer field he should get the assets even if his unit is a lowly "Mech" unit "not qualified" for this function. We had best start insuring we have ONE INFANTRY that can do all functions, which means in-extremis rappel and fast rope Air Assaults because in a cityfight what works is what will be needed. In the confusing environs of a city made from concrete and steel, plans and communication will be far from perfect. Units will be forced to rely on old fashion wire and runners much like armies in the earlier part of the century. Control by anything above the company level will be an illusion and a drain on combat power if we obsess with it. The place to begin this transformation to a cityfight-savvy U.S. Army would be at the Joint Readiness Training Center (JRTC) at Fort Polk, Louisiana's Shughart-Gordon MOUT site by insisting on multiple courses of action in mission planning, an actual "learning curve" that demands that innovative TTP gets employed and realistic simulations that use explosive weapons effects.

Multiple A, B, C Courses of Action in troop leading procedures

Mogadishu proved the weakness of taking one favored course of action and building into it an unrealistic level of detail. What is needed is some respect for the fog of war (Murphy), some "what-ifffing" of what the enemy can do and thus a "Plan B" and a "Plan C" that are executable in the heat of battle. The American Army must no longer just have a favored and micromanaged "Plan A" which we use against straw men OPFOR. we must insist that there is a Plan B--what we do if environmental, terrain, and friction of war factors demand that we change our course and a 'Plan C' which is if the ENEMY interferes and all our assumptions go sour. This course of action is based on a completely new scheme so we can still prevail. To do this, we must stop being "*anal retentive*" about minutiae like how many camouflage nets are

going to be carried on each vehicle. We must build into our SOPs enough resilience so that we are always in a state of go-to-war readiness, with a loading arrangement that is good for the majority of situations. This could save critical troop leading time to actually war game with a designated OPFOR role player on the terrain model Course A and create courses B and C.

Explosive weapons effects simulated realistically so we stop over-relying on "garden hose" small arms fires

We need to stop kidding ourselves with MILES "laser tag" systems as a way to replicate RPGs using just a handful of Vipers, many of which are inoperative. In real life, the RPG launcher is found in the thousands, grenades to be fired in the millions. The RPG , the weapon of choice for most armies, is simply not replicated at JRTC. It's a bitter irony that the MOUT city at JRTC, is named after two men who died earning Medals of Honor saving a helicopter pilot who was shot down by massed RPGs. This ***under-estimation*** of enemy explosive weapons effect capabilities in prior U.S. training is what led to their loss.⁴⁵ The solution is to start using Simmunition in cityfight training; actual reduced charge bullets with colored markers fired through inexpensive facsimile RPG and U.S. rocket launchers (adaptors). This would realistically portray the modern, explosives weapons effect dominated close fight. The AT4 already has a 9mm spotter round adaptor and could easily shoot frangible 9mm "FX" rounds made by Simmunition of say an orange color to mark a rocket hit to contrast with the red/blue colors used for small arms. When units "pause-ex" before going to Shughart-Gordon MOUT combat, they should get rid of MILES, switch bolts to Simmunition, don protective body armor and eyewear and train like we need to fight.

Insist on a "Learning Curve" at Combat training Centers (CTCs)

Units that go to CTCs like JRTC arrive with their own prejudices and TTP opinions, fight the war, usually get slaughtered, then leave. There is no "*learning curve*" in this because its too easy to disregard the experience and go back to "*business as usual*". Unless a Commander is going to be around for a replay like Colonel Bolger described in *The Battle for Hunger Hill*⁴⁶, a new Commander will be in charge the next time the unit rotates through JRTC and the same mistakes will be repeated. Observer/Controller (OC) advice is not heeded and thus, the U.S. Army is not getting better at cityfighting as much as it could be. Instead, the first 3 days of JRTC, while the troops are preparing, the Leaders from Company level on up should war game the ENTIRE rotation's war against a designated OPFOR team and given "*a bloody nose*" to show their tactics need to be changed BEFORE actually doing it with troops and vehicles. Their plans MUST be changed according to OC advice, that once heeded will result in units actually winning battles against the OPFOR at JRTC. This would include MOUT MAG tactics, gunshields and siege engine AFVs as they become available to visiting BlueFor units. Units visiting JRTC and cityfighting will automatically be brought "*up to speed*" with the latest MOUT equipment and TTP, transforming the entire U.S. Army into a force ready to dominate the 21st century battlefield.

CONCLUSION:

Shortly after the Gulf War, a reporter asked an Army officer if the force that won in the Gulf would have done better in Vietnam. He replied that, "*we don't do Jungles and mountains.*" Although humorous, that statement pretty much sums up U.S. Military thought on cities. Our Doctrine calls for bypassing them when possible. Unfortunately this is wishful thinking and at bests shortsighted for sure.

Ask yourself what kind of Army and marine corps does not want to, or plan to fight on much of its home territory let alone where most of the peoples of the world reside? How can we be involved in hostile operations in a foreign land and "bypass" its cities and expect to win? The answer to all of these questions is obviously, [we will have to do cities]. It cannot be avoided. Many who came before us like the Germans and Russians Have found out that it can't be done. As we have already pointed out that's where the people are. More importantly if we take likely enemies into consideration, where would they choose to fight us? If any potential enemy takes the time to look at our military (and we assure you they are) it's clear that our technology, air supremacy, small amounts of infantry and aversion to casualties will work against us in an urban setting. In fact it's the perfect place to show up our weaknesses. Enough wailing about how tough cityfights are!, we have outlined how to correct this, let's move out smartly and accomplish the mission.

FEEDBACK!

A defense analyst writes:

"I believe strongly that the marines are offering something to everyone with their three block lie. They are passing out meals to starving children (liberals love that), quelling civil disturbances (very moderate for the new world order set) and fighting to the death (insert marine corps hymn for the pride of the corps). What BS."

A military historian writes:

"Hi Mike,

Okay, a long note but not as long as your article!!!!

Your article was an interesting read, and historical examples lent credibility to your central thesis of properly preparing people (as opposed to machines) to fight in urban environments.

As a "civilian" with no formal combat training (but hey, not so bad at paintball) it would be difficult for me to comment on the tactics you lay out. However, it seems sensible to me that people who are actually training on urban fighting should have special insight into what tactics work, and what equipment would make it work better. Fortunately you can also draw upon the experiences of others, be them veterans of MOOTW in Somalia, limited conflicts in Central America, and larger scale operations in Vietnam, and even Korea and WW2.

Perhaps I can make observations in general terms. First, the idea that you 'pick' the place to fight is more of a principle than tactic, but somewhere this has been lost to some leaders. You demonstrate that city fighting is inevitable if the US and her principle allies (such as Britain) wish to continue to exert influence in other parts of the world, simply because the enemy will choose to take their stand in the terrain which suits them best. The motivation for an enemy to draw the US into a city fight is clear, as you point out: the American public would be repulsed by even the most lopsided exchange ratios. It would only be prudent to assume that someday you will find yourself in a city

situation; it could be MOOTW, Limited, or Total War. It would be foolish to think that every adversary would be as tactically weak as Hussien, and that your leadership will always be sound.

The recent Kosovo conflict, the reason for 'victory' being misunderstood by most people as people air power coercion alone, only serves to heighten the civilian population's expectations of their Armed Forces, reinforce the belief that the forces must be adequately funded (how else could they have 'won' without a combat death?), and heighten the disdain for losses in combat. Few realize that only when NATO agreed to an invasion that the Serbs quit the battle. Keeping the agreement to invade "secret" from the general population only reinforces the myth. There is an unhealthy belief in society-at-large at that wars can be antisepic. War is an ugly, shitty, horrible experience. Dulce bellum inexpertis: "War is delightful to those who have no experience of it." If Erasmus was alive today, he might have only to change 'delightful' to 'relatively safe' to capture the prevailing mood.

You make the strong case for unique equipment for the urban jungle. I tried to think of some general principles around combat interactions. There's a continuum of "weight" of force. The destructive power increases by order of magnitudes from a punch in the chin to a knife; to a gun; to a machine gun; to a HEAT round; to a 2,000lb bomb, etc., etc. It would seem that to assure victory in an attrition battle you either have to employ much more the same kind of force or employ similar sized forces with systems an order of magnitude greater. To win the city fight, you'll have to have many more troops (that won't happen) or systems more powerful than guns -- as you advocate. Manuever tactics in city fights, I doubt, will not have widespread application but will be restricted to platoon movements or smaller. So you'll either have to figure out how to get "behind" the enemy or use much greater calibre...or, if you are looking for really lopsided exchange result, do both. Western society will compell you to do both.

You might be interested to know that some of the shortcommings you identify in your organization are prevalent in the business world. While middle managers use team problem solving tacts to successfully complete their jobs, it seems that once people get to a certain level they forget that the front line people often have the some of the greatest insight -- certainly when the 'rubber hits the road.' I am in Senior Management for a large retailer; I am keen to ensure that any so-called expert advice is qualified by the practical insights of the front line staff at stores. (It is a practice that at times horrifys my peers.) There is a great tendency for people in head offices to think that, because they may understand grand strategy or be armed with industry trends and consulting reports, that they feel that in addition to determining which fight to fight, that they can also figure out exactly how: after all, if I can be a vice president, surely I can be a good sales clerk -- or if I am a senior officer, surely I can be a good combat Soldier. So wrong, as you know. So for you guys, it might be acceptable that leadership says that city fights are unlikely; but, if they acknowledge the possibility of such sometime in the next 20 years, they shouldn't be prescribing equipment. Let the people doing the job develop the tools -- and if leadership is worried they will stick to the old ways, they provide the environment for them to imagine. But don't do the imagining for them.

The back up plan? Now here's a risk, because I'm going to suggest that RAND actually has some good work on this. They have something called "Assumption Based Planning" which in the form they propose is far too complex to be useful in battle -- it's

for strategic planning. BUT the basic concepts are quite good, and could serve has "rules of thumb" when planning missions large or small. The author wrote to me adding that people who do "what ifs?" are often seen as naysayers and unenthusiastic, and ultimately suppressed. ABP takes the ego out of the situation and gives the platoon leader, manager, etc., the frame work to ask simple questions. In correspondence the author seems quite level headed and not like a consultant (or, as my brother says, 'insultant'.) I'll send you the book (only 100 pages), get you the ISBN if you want it, or fax you the 5 page summary.

Write me at work: XXXXXXXXX if you want stuff. It's no sweat.

A Canadian writes:

"Well Mike, keep up the good work. It's really great to hear people not just talking about problems with their organization, but doing serious work to help solve the problems. (XXXXXXX once wrote to me: "frustration with peers is part of the price you pay for thinking seriously about your profession.") We are few and far between.

Keep thinking, keep working with your fellow Soldiers, and make it happen.

Push.

You don't expect Canada do do the work, do you??? (It's no crack at our Soldiers, but of the politicians who fund them.)

Feel free to send me anything to read over. I find the stuff really interesting.

Cheers"

XXXXXXX

P.S. As far as the marine slagging, well, my wife likes their dress uniforms better.

A 1st TSG (A) Staffer writes:

"First off I generally liked his responses. These criticisms are not personal.

1. MOOTW is a dangerous BS phrase, meant to fool the American people into thinking that there's no danger.

Language is very important and whenever I see those initials my blood boils. To the parents of one of the 18 Rangers killed in Mogadishu, saying that Somalia is a MOOTW will ring very hollow. Our leadership tried very hard to convince everyone in this country that Vietnam was part of the "Cold War". Most citizens of this country didn't buy it because it seemed rather hot if you were there. Calling it cold war was an attempt to give us the warm and fuzzies, as if we can call it "cold" war and Americans won't know their sons are in danger. It created a cynicism that exists to this day.

The marines call their versions of urban combat in MOOTW, "The Three Block War". The idea is that a unit of Marines on one street can be handing out meals, while on the next another unit will be dealing with a "civil disturbance and in another block a unit is

fighting a hot fight against well armed and motivated men.

This is such total BS I choke writing it. First of all no ones getting any meals if my comrades are dying a few blocks over. In fact, one false move will get you a meal of steel. That civil disturbance will be a blood bath and won't look much different from the third block. It's undoable! It's another attempt to fool the American people as to the nature of war. They feel they can get the American People to join in if they think it's safe.

From my point of view, most people will participate in these adventures if you're honest with them. But once the lies have been told, you won't get much support.

2. ABC.

Mike's view of three plans (A,B and "Oh Shit") is based on the reality of planning operations on the tactical level in combat. I would be very careful of wasting too much time on the ABC. It just takes a lot of time and is an intellectual exercise out of place in war. Thoughtful yes, but you must be practiced in quick and violent action. It must not be a reason not to do anything quickly. Change in war happens at warp speed and we must use a model that takes this into account. Although I called it a tactical level idea, it should be enforced up to Corps level in my view. Even if you are resting your men, the decision to do it must be made quickly and with proper contingencies for changing (and likely) situations."

A Military Historian/futurist writes:

"Great pages! You definitely are one of the few innovative thinkers about warfare today who is making his views known, especially in the area of urban ops. A lot of people criticise the [Russians for how they fared in the various battles for Grozny](#), the truth is few other armies would do better and most worse. The Russian military may be underfunded and undertrained but at least they have equipment like the ZSU-23-4 tracked anti-aircraft vehicle, the "Schmel" incendiary/FAE rocket launcher and 73/100mm guns on their IFVs, all of which proved very effective in urban fighting. The U.S. and British militaries AFAIK have no equivalent of this stuff."

Thanks, keep up the good work"

NOTES

1. Captain Charles Ferry, Mogadishu, October 1993: Personal Account of a Rifle Company XO (Fort Benning, Georgia, U.S. Army Infantry magazine, 1994) p. 24-29
2. Ralph Zumbro, Iron chariots (New York, Simon & Schuster Pocket Books, 1998), pp. 147-174
3. SLA Marshall, Men against Fire: The Problem of Battle Command in Future War (Peter Smith publishing, 1975)
4. John Warry, Alexander 334-323 B.C.: conquest of the Persian empire, (London, England, Osprey books, 1991) pp. 30-40

5. Martin Van Creveld, Technology and War : From 2000 B.C. to the Present, (New York, Free Press, 1991)

6. Ralph Zumbro, Tank Aces (New York, Simon & Schuster Pocket Books, 1998)

7. Interview with Bruce Gudmundsson, Editor, Tactical Notebook, April 1993, he actually interviewed the French officer, LaFarge who created infiltration tactics before he died. He published pamphlets that were distributed to men in the trenches but it backfired when the Germans captured the literature in a trench raid.

8. LTC Richard D. Hooker Junior, Maneuver Warfare: an anthology (Novato, California: Presidio Press, 1993)

9. Ian Hogg, Great Battles of World War 2 (New York, Double Day, 1987), pp. 9-24

10. <http://www.geocities.com/Pentagon/Quarters/2116/airlandbattle.htm>

11 IBID Hogg, p. 123

12. LTG Francis Tucker, The Pattern of War (Washington D.C.: U.S. Government Printing Office 623-279/10260 USMC HQ Washington D.C., 1989), pp. 20-105

Tucker asserts that if war is not properly understood, maneuver ceases and deadlock follows. At that point "siege engines" must be capable of breaking through enemy opposition to regain maneuver. He explains how we live in an Icarean world where 3D maneuver from the air will be the dominant war form.

13. English, John, Gudmundsson, Bruce I., On infantry. (Westport, CT: Greenwood Publishing Group; Praeger press, 1994)

14. U.S. Army doctrine for urban areas is to have a preponderance of firepower and combat engineering means:

FM 90-10-1 Infantryman's guide to Combat in built-up areas (Washington D.C.: U.S. Government Printing Office U.S. Army HQ, 1993), pp. 1-55

<http://www.adtdl.army.mil/cgi-bin/atdl.dll/fm/90-10-1/default.htm>

U.S. Army history validates the need for this type mechanical advantage;

Robert Black, Rangers in WWII, (New York: St. Martin's Mass Market paperbacks, 1994) p. 37
Black, a Ranger veteran said the following about the disastrous Dieppe Raid, where commandos assaulted fortified positions with little fire support other than what they carried in their hands;

"68% of the 4,963 Canadian troops were casualties and 913 were killed outright.... On August 19, 1942, the Canadians did all that flesh could do against fire, but has been proven on battlefield after battlefield against an aroused, entrenched enemy, COURAGE IS NOT A SUBSTITUTE FOR FIRE SUPPORT"

Yet in recent years, firepower and mobility platforms have been retired and not replaced making it more difficult to gain even full 2-D maneuver.

CSM Timothy B. Chadwick, Death of the Combat Engineer Vehicle (Fort Leonard-Wood, Missouri, U.S. Army Engineer magazine, December 1996)

www.wood.army.mil/ENGRMAG/PB5964/perview.htm

15. General William E. DePuy USA (ret), Infantry Combat, (Columbus, Georgia: U.S. Army Infantry magazine Mar-Apr 1990), pp. 18-23

<http://www.geocities.com/Pentagon/Quarters/2116/airlandbattle.htm>

General Depuy asserts that "maneuver must be earned", it is a condition we must fight for and build for and not assume will be available without a fight or constructive effort.

16. LTC Ralph Peters, Our Soldiers, their cities; (Carlisle Barracks, Pennsylvania, U.S. Army Parameters magazine, 1996)

<http://carlisle-www.army.mil/usawc/parameters/96spring/peters.htm>

17. Colonel Daniel P. Bolger, Death Ground: Today's American infantry in battle, (Novato, California: Presidio Press, February 1999)

18. General MacArthur's Operation Downfall: the invasion of Japan

<http://user.aol.com/mcdw/invasion.htm>

19. www.csi.ad.jp/ABOMB/index.html

20. Dr. Steven Canby; Classic Light infantry, unpublished research report (Maryland, C & L Associates, 1987)

Culture Wars, Major Donald E. Vandergriff, USA Originally published as a chapter in Digital War: A View from the Frontline

http://d-n-i.net/FCS_Folder/culture_wars.htm

21. LTC David Grossman's ON KILLING web site: www.killology.com

www.killology.com/PsychologicalEffects.htm

www.killology.com/Weaponry.htm

www.killology.com/wpnryfig1.JPG

22. BG S.L. A. Marshall, Men against fire: The Problem of Battle Command in Future War (Peter Smith publishing, 1975)

23. T.R. Fehrenback, This Kind of War :The Classic Korean War History (London, Brassey's: 1998)

24. Neil Sheehan, Bright Shining Lie (New York, Vintage Books, 1989)
LTC J.D. Coleman (retired), Choppers (New York, St. Martin's paperbacks, 1988), pp. 2-10
25. LTG James M. Gavin, "Cavalry and I don't mean horses"
26. Sir Robert Thompson, War in Peace: conventional and guerrilla warfare since 1945 (New York, Harmony Books, 1981)
- 27 BG David L. Grange et al; Air-Mech-Strike: 3-Dimensional Phalanx: full spectrum maneuver warfare for the 21st century, (Paducah, Kentucky: Turner publications, 2000), pp. 76-100
28. Colonel Daniel P. Bolger, Death Ground: Today's American infantry in battle, (Novato, California: Presidio Press, February 1999)
29. Col (Major) Michael Kazmierski, United States Army Power Projection in the 21st Century: the conventional Airborne forces must be modernized to meet the Army Chief of Staff's strategic force requirements and the Nation's future threats (Fort Leavenworth, Kansas, U.S. Army Command and General Staff College Master's Thesis, Defense Technical Information Center File # AD A226 216), pp. 13-53
- www.geocities.com/Pentagon/Quarters/2116/airbornetoc.htm
30. Mark Bowden, Blackhawk down!: A story of modern war (Penguin Putnam books, 1999 and 2000), pp. 95
www.amazon.com/exec/obidos/search-handle-form/103-6593991-3811860
31. Personal interview with former 1st Infantry Division Commander, General David L. Grange, January 15, 2000 on how he supplied his men HMMWV trucks from war stocks to perform peacekeeping in lieu of heavier vehicles.
32. tracks versus wheels
<http://147.238.100.101/dtd/armormag/ma98/2wheels98.pdf>
www.geocities.com/equipmentshop/wheeledbooboo.htm
33. IBID p. 128, Van Creveld, Technology and War
34. Alvin and Heidi Toffler, War and Anti-War: Making Sense of Today's Global Chaos (New York, Warner Mass Market Paperback, 1995), pp. 10-42
www.amazon.com/exec/obidos/ASIN/0446602590/qid=953747016/sr=1-3/103-6593991-3811860
- Probable cause for the de-emphasis on physical mechanical advantage is the influence of the Toffler's writings elevating digital mental awareness to a stature above the physical plane we still live on and fight for. They see the world as changing by "waves" of human progress:

1st Wave: agrarian, hand-to-hand combat
2d Wave: industrial age, machine combat
3d Wave: computers, information war

35. 2001 DOD budget

www.house.gov/hasc/billsandreports/106thcongress/hr4205aspaspassedbyhouse.htm

36. IBID pp. 326-327, Bolger, Death Ground...

37. LTC Richard D. Hooker, Jr. , America's Two Armies; Arlington, Virginia, Joint Forces Quarterly Autumn/Winter 1994/95 p.40

www.dtic.mil/doctrine/jel/jfq_pubs/jfq0806.pdf

38. <http://www.militarycity.com/apwire.html>

OSPREY MEMORIAL IN THE WORKS (7/28/00)

Marine officials and citizens of Marana, Ariz., are working on the design for a memorial commemorating 19 marines killed when their MV-22 Osprey tilt-rotor plane crashed there in April. A dedication ceremony is planned for late summer or early fall at the Marana Northwest Regional Airport, about 30 miles northwest of Tucson, where the plane went down during a night training exercise, airport manager Roger Dougan and marine officials said. Dougan said officials have discussed erecting a stone monument or putting up a plaque. A senior marine officer in Washington lauded the community of Marana, airport officials and the Northwest Fire District for their help at the crash scene. Lt. Gen. Fred McCorkle said Dougan and his 17-year-old son, Thomas, were instrumental in helping marines manage the scene after the April 8 accident.

39. Sun Tzu, The Art of War. translation and forward by Samuel B. Griffith, forward by B.H. Liddell Hart. (London, England: Oxford University Press, 1973)

40. Blackhawk Down! Web site based on newspaper series

www.philly.com/packages/somalia/ask/ask12.asp

41. www.israelwire.com/New/990224/99022425.html

42. www.mishalov.com/death_ia_drang_valley.html

43. E-mail interview with undisclosed General Dynamics Land Systems engineer 1999-2000.

44. LTC Michael Harris, Shoulder-fired rockets (Fort Benning, Georgia, U.S. Army Infantry magazine, March-April 1997)

LTC Lester Grau, The RPG-7 On the Battlefields of Today and Tomorrow (Fort Benning, Georgia, U.S. Army Infantry magazine, May-August 1998 issue of Infantry)

<http://call.army.mil/call/fmso/fmsopubs/issues/weapon.htm>

45. Author's personal observation of JRTC during a Light/Heavy rotation through Shughart-Gordon MOUT site

46. Colonel Daniel P. Bolger, *The Battle of Hunger Hill: The 1st Battalion, 327th Infantry Regiment at the Joint Readiness Training Center* (Novato, California, Presidio Press, 1997)

47. FMSO:

<http://call.army.mil/call/fmso/newstuff.htm>