

WARNING!

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Bashing The Laser Range Finder With a Rock

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"To envision and describe accurately the features and dimensions of the landscape of future battle is a nearly impossible task. The record of Americans' ability to predict the nature of the next war (not to mention its causes, location, time, adversary or adversaries, and allies) has been uniformly dismal....But the myopia of the past in no way lessens the need to prepare. Quite the contrary. Preparations of the most certain sort possible are required for a most uncertain future." Heller and Stofft.¹

"In Chechnya we did not have a war which had been expected, for which the troops and staffs were preparing, which had been studied in academies and planned accordingly, and which would have complied with regulations and field manuals." Colonel General Anatoli Afanasyevich Shkirko.²

When trying to forecast future war, emerging technologies play a dominant role as military planners integrate geo-strategic realities, national interests, developing alliances and existing armed forces with the uncertainties of the future. Since technological advances have had a major impact on the war-fighting of the past, it is prudent to plan for the incorporation or nullification of future technologies before and as they appear. Such future technologies have the most application in fighting a conventional, maneuver war against a modernized, but less-technologically advanced armed force. It is also prudent to plan to be able to apply force effectively across the entire spectrum of conflict--even where emerging technologies have less impact.

The Face of Future War

Military planners and forecasters are constantly accused of planning for the last war. What future warfare will look like depends, to a great extent, on the issues of where, under what circumstances, and for what purposes a country will commit armed forces. The Russian General Staff's vision of future theater war anticipates dynamic, high-tempo, high-intensity land-air operations encompassing vast areas and extending into outer space. Precision-guided munitions

(PGMs), which approach the effectiveness of tactical nuclear weapons but avoid most collateral damage, would be employed from war's outset in an attempt to destroy enemy precision-guided munitions, command and control, air defense and operational formations. Tactical warfare would become increasingly lethal and characterized by non-linear combat. Front lines disappear. Communications become sporadic and control difficult. The information battle is paramount; mastering the processing, sorting and analyzing of intelligence products from high-tech collection systems and managing command and control information to provide some order to the chaos of battle. This view of future war puts a premium on the technical aspects of maneuver, strong-point defense, technological integration and the personal dimensions of keen professionalism and effective training. It also puts a premium on maintaining large stocks of expensive, constantly-upgraded PGMs.³ The Russian vision may be partially accurate, but as "Desert Storm" demonstrated, only the United States and a few European nations are currently able to conduct this type of war on a theater-level.⁴

The US shares, to a certain extent, this Russian view of future war. This view and the latest "revolution in military affairs" (RMA), coupled with budgetary reductions, has led the US Armed Forces to concentrate on emerging technologies to replace expensive manpower. If the long-range, high-tech, computer-heavy warfare forecast of the current popular press is correct, this concentration is wholly justified.⁵ One of the enduring lessons from "Desert Storm" is that a nation does not want to stand up against the precision-guided munitions and cruise missiles of the United States unless it has its own large supply of precision-guided munitions and cruise missiles, or, at the very least, an effective air defense or a limited target set of marginal value. At present, the countries that have a large supply of high-tech weaponry are few and unlikely to go to war with the United States in the near future.

This does not mean that the United States has entered a period of guaranteed peace or that nations or groupings without a large supply of high technology weaponry will avoid conflict with the United States. The United States has global commitments and interests which will come into conflict with hostile nations or groupings. These nations or groupings may choose, if necessary, to challenge the United States by blunting its technological edge. They might do this in four ways: first, by hosting the confrontation in a locale where trained infantry, rather than technological wizardry, is the decisive factor; second, by equipping the force with a select number of "off-the-shelf" technological systems that negate or seriously disrupt the US technological advantage; third, by matching US armed force with an economic, media or social counter; fourth, by accepting an asymmetry in casualties in order to gain a protracted conflict.

Pick your strategy

The US Army is preparing to win decisively a future technological war of annihilation with minimum casualties and quick victory. They will do so by annihilating enemy command and control, major systems and coherent formations--preferably from a distance. A major problem is that the US Army lacks a dominant single threat against which to plan. Prior to the US entry in World War II, the US Army conducted the pivotal Louisiana maneuvers which provided a focus and direction to doctrine and planning. The implicit threat was the German Wehrmacht, which had defeated Poland and was in the process of chasing the remnants of the British and French Armies to the English channel. This implicit threat allowed the US to purge much of the

ambiguity from its "Color Plans." Currently, the US Army is confronted with multiple, ill-defined threats and lacks a recent combat experience to focus on. Desert Storm, despite its stellar successes, provides only a partial threat model for future war. Further, it is easier to draw critical lessons from a defeat rather than victory, yet US analysts are not studying the lessons that the Iraqis are drawing from their own Gulf War defeat.⁶

Another major problem is the preparation of a technological battlefield in the post-Cold-War world. The technological battlefield of the future requires a prepared theater with developed infrastructure. In 1996, former Defense Secretary Caspar Weinberger posits five scenarios for future war against North Korea, the Persian Gulf, Mexico, Russia and Japan.⁷ These scenarios all allow the US to launch from a developed lodgement within a prepared theater. In the past, US war planning was theater specific, but today the US is faced with global contingencies. The realities of a multi-polar world dictate that the US may need to commit forces in an undeveloped theater, such as its recent commitments to Somalia and Rwanda. If the commitment is for war, the theater might require preparation. Desert Storm was preceded by Desert Shield, during which the allies took nearly five months to prepare the theater and develop the infrastructure prior to war. The technological battlefield requires theater development, but this development may be lacking and the enemy unwilling to postpone battle until the requisite preparations have been accomplished.

A third major problem is that the US is planning for a war of annihilation and developing the force structure, equipment and doctrine to support such a war. The US traditionally planned for rapid wars of annihilation, but has usually ended up in protracted wars of attrition. Only the Mexican War, Spanish-American War and Gulf War have succeeded as US wars of annihilation.⁸ Should the US get involved in a future war and manage to win it by annihilation, all is well and good, and the US faith in a quick and decisive victory through the RMA will be justified. If, however, the US plans for a war of annihilation but the enemy manages to preserve its combat power and converts the war into a protracted war of attrition, the US loses the advantages of a small, professional army as casualties mount, the size of forces required to continue the war increase, and reserves and other forces must be mobilized or drafted.⁹

Selecting an annihilation or attrition strategy in advance is necessary for selecting the proper force structure, research and development, force deployment and training. Failure to foresee the right strategy can have serious consequences. An example is found in the Soviet debates on attrition versus annihilation strategies in the 1920s. A. A. Svechin, a former Tsarist general who became director of the history of military art department of the Red Army General Staff Academy, wrote on attrition warfare in the 1920s.¹⁰ In his view, the best way for the Soviet Union to defend itself would be by using frontier border troops backed by mobile, lightly armed defenders who would not become decisively engaged, but rather would lure the attacker into the depths of the country. While the attacker overextended his lines of communication and diffused his combat power, the Soviets would mass forces for a powerful counterstroke or counteroffensive. At the optimum time, they would destroy the attacker within the confines of the Soviet Union.

This view was opposed by M. N. Tukhachevsky, V. K. Triandafillov, N. E. Varfolomeyev, G. S. Isserson and other prominent theoreticians of the mid-1920s. In their view, it was best to

annihilate enemy forces on enemy territory and, consequently, when war broke out to launch immediately an offensive on enemy territory.¹¹ This annihilation school of military thought held sway in the Soviet Armed Forces for 60-65 years, despite the fact that Stalin, Timoshenko and Zhukov lost the bulk of the Red Army during the initial period of the Great Patriotic War by massing forces forward in the vain hope of launching an immediate and decisive counter-offensive against invading Germany.¹² Their wrong choice of initial strategy almost cost them the war, yet later Soviet successes, and the suppression of Svechin's works, kept the annihilation strategy alive until the collapse of the Soviet Union. The Soviet War in Afghanistan and the Russian War in Chechnya were both planned as rapid wars of annihilation. They both turned into bloody, protracted wars of attrition.

Though time and technology have changed the theater of war, the question of annihilation versus attrition warfare remains even in the age of stand-off weapons. The US Army hopes to use the RMA to avoid costly, protracted conflicts of attrition, but it is often to the advantage of potential adversaries to blunt or negate the US technological edge and force the US into attrition warfare. The US reliance on a small, professional military, backed by the technological promise of the RMA, has some critical problems when it comes to diverse, global commitments.

The Infantry-intensive option

The leverage technology offers depends on the circumstances shaping combat such as the theater, the opponent and the objective. Technology offers little decisive advantage in guerrilla warfare, urban combat, peace enforcement operations and combat in rugged terrain. The weapon of choice in these conditions remains copious quantities of well-trained infantrymen. Modern US infantrymen are expensive, and their introduction is a serious step which represents the commitment of national power and will to a region or conflict. Often, operations in these conditions also signify a drawn-out contest where the very definition of victory is elusive. Yet, the number of available US infantrymen is declining as the army down-sizes.

Guerrilla war. An effective way for a technologically less-advanced country, or a faction within that country, to fight a technologically-advanced country or coalition is through guerrilla war. Guerrilla war, a test of national will and the ability to endure, negates many of the advantages of technology. The guerrillas remained when the French left Algeria and Indochina, the United States left South Vietnam, and the Soviets left Afghanistan. As US forces deploy to areas of civil or ethnic strife such as Somalia, Rwanda, former Yugoslavia and Haiti, the potential for US involvement in a guerrilla war grows. There are several conditions for waging successful guerrilla war against a foreign power. First, a proportion of the population has to support or acquiesce to the presence of indigenous guerrilla forces in their midst. Second, there has to be a willingness to accept significant casualties because guerrilla war is very expensive in terms of noncombatant lives.¹³ Third, there has to be some guerrilla area of safe haven and a source of resupply. What is not necessary in guerrilla war is military victory. For the guerrilla, tactical victory is often mere survival of the guerrilla force and the continued will to outlast the enemy over the course of decades. The side with the greatest moral commitment, be it patriotic, religious or ideological, will eventually win through higher morale, obstinacy and survival.

Fighting a guerrilla war, on the other hand, presents several challenges to the force reliant on high technology systems over manpower. First, the lines of communication, cities, bases and civilian infrastructure need to be secured. This requires a lot of ground forces--not technology. The bulk of the committed forces will be involved in security. Second, forces will need to be reequipped, restructured and retrained for fighting guerrillas. Third, war-winning systems such as modern tanks, high-performance aircraft and laser-guided artillery projectiles may have local value, but do little ultimately to defeat guerrillas who know the theater intimately. Fourth, technological sophistication, training, material support, and numbers of combatants are not the war winners. The conventional force also needs to be psychologically fit, stubborn, patient, and motivated for the long-term fight (that ultimately may not be its own fight). The conventional force's supporting population needs to share the patience and belief in the rightness of the cause.¹⁴

Urban combat. Modern armies have generally sought to avoid urban combat since it is expensive in terms of personnel, logistics and time. Urban combat can be part of a guerrilla war, as in Chechnya and Somalia, but can also be fought by contending conventional forces. Regardless, technology plays a small role in the brutal, infantry-intensive, house-to-house fighting of urban combat.¹⁵ Should the civilian populace remain in the city during the fighting, even more dismounted conventional ground forces are required to look after the needs of the civilians.

Peace-enforcement operations. The US Army's commitment to peace-keeping and peace-enforcement missions has risen significantly, with mixed results, since the end of the cold war. Peace operations require little technology, lots of dismounted ground forces, and different training objectives. Frequently, military missions in peace operations resemble those of police forces. The combat readiness of forces committed to peace operations could be reduced, since the force is doing things other than training for combat. Often this degradation of combat readiness is only temporary, but, as recent experience shows, expansion of missions or "mission creep" is very possible in peace-enforcement operations, and the peace-keepers often become combatants with little warning.

Combat in rugged terrain. The application of technology is limited by combat in heavy forest, jungle, mountains and swamps. The weapons, field gear, communications equipment and transport designed for conventional war are not optimized for rugged terrain and will often work less effectively or fail completely on rugged terrain. US experience in Vietnam and Burma demonstrated the limits of technology and showed that dismounted infantry, whether conventional or guerrilla, are the most effective combatants in difficult terrain.

The "off-the shelf" technology option

Nations or groupings that want to confront a high-technology force do not have to match that force system-by-system. Rather, they can equip their forces with a select number of "off-the-shelf" technological systems, from the world's arms merchants, that negate or seriously disrupt the opponent's technological advantage. Prior to the Falklands War, Argentina had just five Exocet missiles in theater which it had purchased from France. Britain was so busy protecting the *HMS Hermes* and *HMS Invincible* aircraft carriers from the Exocet threat that Argentina was able to concentrate on the rest of the fleet and sink 14 other ships with iron bombs. Argentina

might have sunk more if their bombs had naval fuzes. The feared Argentinean Exocets sank the *Atlantic Conveyor* container ship and the *HMS Sheffield* destroyer. The *Atlantic Conveyor* was a severe loss since it carried needed supplies for the long-term and doubled as a reserve helicopter carrier. Britain lost up to half their helicopters with the *Atlantic Conveyor*. This loss did not slow the progress of the war but strained the airmobile capability of the British force. The British Army became primarily foot mobile and was forced to maneuver at the pace of a rucksack-laden infantryman. Fortunately for the British, Argentina's conscript army was passive and ineffective.

High-technology systems often depend on a finite number of supporting systems. The loss, jamming or incapacitation of several satellites can knock out the crucial global positioning system (GPS) in a theater. Scenarios abound about a group of dedicated computer hackers gaining access to, and possibly controlling, a high-technology command and control system and denying its use to its owner. Further, relatively cheap, readily available systems can defeat expensive high-technology systems. A large number of relatively inaccurate, yet hard to find, mobile surface-to-surface missiles loaded with chemicals or cratering and denial munitions can deny the use of airfields to a high-technology force. Cruise missiles can deny the use of maritime gulfs and chokepoints to a high-technology force. Simple, cheap maritime mines, such as those Iraqi mines which defeated an expensive US Navy Aegis cruiser and a helicopter carrier during Desert Storm, are still quite effective in gulfs, straits and maritime chokepoints. Atomic warheads are now a fifty-year-old technology. Their production is an engineering problem, not a problem of scientific knowledge. The atomic weapon could represent the *primitive* technological counter to US technological superiority and place the US on the opposite side of its former flexible response doctrine.¹⁶ A nation, or a group within a nation, can influence or dissuade the government of a high-technology force by the mere possession of these atomic weapons.

Further, the ultimate weapon (or weapons system) has not been invented nor will it be. For every advance in technology, there has been a counter. War, and the preparation for war, is a dialectical process involving actions and counteractions between the contesting sides. A herd of sheep can effectively clear an antipersonnel minefield. Stand-off mesh or reactive armor can defeat the shaped charge. Dummies and mockups can draw the precision-guided munitions while the real force lies hidden under camouflage screens. Craters can be painted on functional runways. In the barren, open desert of Fort Irwin, California, the well-trained, out-moded Opposing Force still manages to give the technologically-superior blue force a good fight. Often, the Opposing Force wins.

Meeting force with an economic, media or social option

A high-technology force can be matched, or overmatched, by employing an economic, media or social countermeasure. Saddam Hussein attempted an economic and ecological countermeasure by setting the oil-fields of Kuwait on fire--although this did little to help his cause. The death of Omar Khadafi's baby daughter, killed by US airstrikes intended for her father, further weakened European support for the US aerial attack against Libya. The North Vietnamese and Viet Cong countered the US force with a propaganda offensive that featured burning villages, shattered children and corrupt South Vietnamese politicians. The theme was picked up by Western media and the fact of North Vietnamese aggression was swallowed by the broader theme of an unwinnable interference in an Asian war.

The objective of an economic, media or social countermeasure is to influence the political leadership and populace of the high-technology force. The goal is to either prevent the employment of the force or to severely restrict its effectiveness through the use of no-fire zones, rules of engagement and lengthy truces tied to interminable negotiations.

No economy can long afford both guns and butter. A society needs to know the economic costs it will bear in future war. National militaries do not have access to unlimited finances and a war which imposes onerous financial costs with little apparent progress will enjoy little public support. A protracted conflict is, by definition, expensive and an economic countermeasure.

The copious bleeding option

Larger nations or groupings involved in a confrontation with a technological power can choose to accept heavy casualties in order to use up their enemy's technical systems and inflict casualties on the enemy. A nation with a small, professional army cannot fight an extended war and must eventually mobilize forces from the reserves and conscription. The less-technologically-advanced nation accepts asymmetry in casualties in order to gain a protracted conflict.

A high-technology force involved in a protracted conflict eventually becomes a low-technology force. High-technology weapons systems are expended faster than they can be produced and shipped. High-technology components of weapons systems require extensive maintenance, yet the demand for the weapons systems runs counter to maintenance requirements. Heavy, continuous use of weapons systems increases the failure rate of high-technology subsystems. Further, high-technology systems optimized for one theater of war may be suboptimal in another theater. Use of these degraded systems increases their chance of breakdown. After several weeks, or months, of combat, the maintenance posture and reduction of theater stocks may compel a high-technology force to fight with partially-functioning systems in a fairly low-technology manner.

A nation can fight a conflict where it plans to achieve political success without military victory. Egypt did so in its 1973 war with Israel. Israel had decisively defeated Egypt in 1967 and confidently planned to fight its next war in the same manner. Egypt determined how to counter Israeli intelligence, air power and armored forces and set out to win a battle, but not the war. Indeed, Egypt did not win the 1973 war, but its greatly improved military performance shocked Israel and led to the fall of the Israeli government and a peace treaty which returned the entire Sinai peninsula to the Egyptians. The Egyptian effort destroyed the myth of Israeli invincibility and changed the psychological climate in the United States and Israel which led to significant political concessions.¹⁷ Another example is the Tet Offensive, in which the communist military performance changed the psychological climate and sapped American public support for the US effort in Vietnam. The Vietnamese communists suffered a major military defeat, but won a major psychological victory. In the end, the psychological victory was the one that counted.

Bottom line

The Soviet Union provided a predictable stability in international relations that is missing today. It further provided a realistic, defined Threat against which to plan future war. In many respects,

the post-Cold-War world is a much more ambiguous world and it is difficult to plan for future war when the Threat is ill-defined and global. US global commitments may lead it to theaters which require extensive preparation for high-technology warfare and contain the potential for protracted war. Future war may indeed be a computer-driven battle between high-technology systems where man is an operator and battle manager but hardly a traditional warrior. A nation must prepare for this possibility. However, there are limits to technology and a nation must also recognize that expensive refits that do not appreciably improve the effectiveness of the system are not always necessary for the national good. Sometimes, the planners must accept the "good-enough" while planning and resourcing for the other, more probable conflicts in which it may become enmeshed. All the answers are not in the application of new technology. Many of the answers rely on the professional application of significant amounts of conventional ground combat power. Planners need to address the realities of the entire spectrum of conflict in a multi-polar world.

Endnotes

¹. Charles E. Heller and William A. Stofft, *America's First Battles, 1776-1965*, Lawrence: University Press of Kansas, 1986, xiii.[BACK](#)

². Interview with Colonel General Anatoli Afanasyevich Shkirko by Boris Karpov, "Guardians of Public Security. Internal Troops: Problems and Prospects", *Krasnaya zvezda* [Red star], 26 December 1996 as reported in FBIS-SOV-97-002 on the Internet.[BACK](#)

³. The Foreign Military Studies Office (FMSO) has tracked the Soviet and Russian view of future war for several years. FMSO publications which deal with the topic include: Lester W. Grau and Mohammad Yahya Nawroz, "The Soviet Experience in Afghanistan" Lester W. Grau, *Military Review*, September-October 1995, "Desert Defense and Surviving PGMs: The New Russian View", *Red Thrust Star*, January 1995; Lester W. Grau, "From the Ashes: A Russian Approach to Future Maneuver War", *Military Review*, July 1994; Lester W. Grau, "Continuity and Change: A Soviet General Staff View of Future Theater War", *Military Review*, December 1991, 11-24; David M. Glantz, "Trends in Russian (Commonwealth) Force Structuring", (Fort Leavenworth: FMSO, 1992); David M. Glantz, "The Non-linear Nature of Future War: A Soviet/Commonwealth View", (Fort Leavenworth: FMSO, 1992); David M. Glantz, "The Soviet View of Future War", (Fort Leavenworth: FMSO, 1990); Lester W. Grau, "Soviet Non-linear combat: The Challenge of the 90s", (Fort Leavenworth: FMSO, 1990); Lester W. Grau, "Countering Air Assaults: A Russian Dynamic of Future War", (Fort Leavenworth: FMSO, 1992); D. J. Marshall-Hasdell, "Soviet Military Reform and the Afghanistan Experience", (Fort Leavenworth: FMSO, 1992); Lester W. Grau, "Changing Soviet Objective Depths: A Reflection of Changing Combat Circumstances", (Fort Leavenworth: FMSO, 1989); and David M. Glantz, "Spearhead of the Attack: The Role of the Forward Detachment in Tactical Maneuver", (Fort Leavenworth: FMSO, 1988).[BACK](#)

⁴. Indeed, the Russian experience in Chechnya shows that they are currently hard-pressed to conduct effective theater warfare. The once-mighty Soviet Army has fragmented. The experience of the Russian Army in Chechnya shows the effect of national failure to train and maintain its

armed forces at minimal levels. See Ray Finch, "A Face of Future Battle: Chechen Fighter Shamil Basayev", this issue.[BACK](#)

⁵ Richard J. Newman, "Warfare 2020" and "Battles without soldiers?", *U.S. News & World Report*, 5 August 1996, 34-42.[BACK](#)

⁶ This may also be due to the lack of closure on Desert Storm. Saddam Hussein is still in power and rebuilding his armed forces.[BACK](#)

⁷ Caspar Weinberger and Peter Schweizer, *The Next War*, Washington: Regnery Publishing, Incorporated, 1996.[BACK](#)

⁸ In discussions with Jacob Kipp of the Foreign Military Studies Office, actually the Gulf War was a ground operation of annihilation following an air campaign of attrition. The air campaign had two phases--decapitation followed by attrition. The war itself was limited in scope and objective, i.e. the expulsion of the Iraqi army from Kuwait, and did not seek the unconditional surrender of Iraq. The author is grateful for the thoughts of Jacob Kipp, Tim Thomas, Ray Finch, Karl Prinslow, Graham Turbiville, David Glantz and Colonel Charles Johnston in the preparation of this essay.[BACK](#)

⁹ Makhmut Akhmetovich Gareev, *Esli zavtra voyna?..* [If there is war tomorrow?..], Moscow: Vldar, 1995, 122.[BACK](#)

¹⁰ Aleksandr Andreyevich Svechin was born into a military family on 17 August 1878. His father was a major general and Aleksandr followed his footsteps from his boyhood in the cadet corps and the Mikhaylovsky military school. He entered active service in 1895 and later completed the Nikolayevsky Academy of the General Staff. He served in the Russo-Japanese War of 1905. During World War I, he advanced from regimental commander to army and then *front* chief of staff. He voluntarily entered the service of the new Red Army in 1918. He is best known for his work *Strategiya* [Strategy]. *Sovetskaya Voyennaya Entsiklopediya* [Soviet military encyclopedia], Vol 7 (Moscow: Voenizdat, 1979), 264.[BACK](#)

¹¹ Discussion of the Svechin-Tukhachevsky debates and the eventual triumph of the primacy of the offensive over the school of attrition are found in Jacob W. Kipp, "Mass, Mobility, and the Red Army's Road to Operational Art" (Ft. Leavenworth: Soviet Army Studies Office, 1988); Jacob Kipp, "General-Major A. A. Svechin and Modern Warfare: Military History and Military Theory" in the introduction to the translation of the 1927 *Strategy* by A. A. Svechin, Minneapolis: Eastview Publications, 1992, 23-56; and Vitaly Rapoport and Yuri Alexeev, *High Treason: Essays on the History of the Red Army, 1918-1938*, (Durham: Duke University Press, 1985), 124-138. The debate is a continuation of the debate between Delbruck and the German General Staff over the proper strategy for the war between Frederick II and Napoleon. The attrition /annihilation debate goes back well into Western military history.[BACK](#)

¹² Lester W. Grau, "Continuity and Change: A Soviet General Staff View of Future Theater War", *Military Review*, December 1991, 18-20.[BACK](#)

¹³. In the Soviet-Afghan war, the Soviets reportedly killed 1.3 million people and forced another 5.5 million people (one-third of the prewar population) to leave the country as refugees. Another two million were forced to flee the countryside into the cities. Soviet losses were 13,833 killed and 469,685 sick or wounded. See Lester W. Grau, *The Bear Went Over the Mountain: Soviet Combat Tactics in Afghanistan*, Washington: National Defense University Press, 1996, xviii-xix.[BACK](#)

¹⁴. Author's conversations with General Mohammed Yahya Nawroz, Colonel Ali Jalali and other Mujahideen commanders.[BACK](#)

¹⁵. Lester W. Grau, "Russian Urban Tactics: Lessons from the Battle for Grozny", *Strategic Forum*, Number 38, July 1995, passim.[BACK](#)

¹⁶. Richard Betts, "The Downside of the Cutting Edge", *The National Interest*, Fall 1996, 83.[BACK](#)

¹⁷. George W. Gawrych, *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*, Leavenworth Paper Number 21, Fort Leavenworth, Kansas, 1996. "The Egyptians achieved their success by beginning the war with a surprise offensive; by challenging the Israeli Air Force for control of the air with an integrated air defense system; and by enticing the Israelis into launching premature attacks against prepared defensive positions. The limited nature of the conflict, as defined by Sadat's war strategy, favored the defense and attrition warfare." 80-81.[BACK](#)