CROSS-CASE ANALYSIS

The premise of this monograph is that recent significant change in urban operations has more to do with information-related factors than with "traditional" military force factors.\(^1\) This is not to say that information-related factors such as PSYOP or public affairs are now as decisive as a "traditional" MOUT factor such as airpower or combined arms teams. Killing enemy troops will probably remain the most efficacious way to defeat the enemy's will to fight. However, the marginal return from leveraging an information factor—such as the media—may be greater than the marginal return of applying more firepower.

To make a comparison between old and new, we need a baseline set of cases from which to start. This chapter begins by outlining the lessons learned from 22 battles fought before 1982, as described in *Modern Experience in City Combat.*²

¹For example, airpower is an important factor in MOUT and it has changed, but not significantly in relative terms. Helicopters and PGMs are new to MOUT, but they have not been decisive. The media, on the other hand, has significantly changed enough that its role in recent MOUT has been qualitatively different than in the past. "Significant" change here means that the change in the MOUT factor is decisive enough to merit closer attention.

²See R. D. McLaurin, Paul A. Jureidini, David S. McDonald, and Kurt J. Sellers, *Modern Experience in City Combat*, Aberdeen Proving Ground, MD: U.S. Army Human Engineering Laboratory, March 1987.

SUMMARY OF LESSONS BASED ON EARLIER MOUT

The influential publication *Modern Experience in City Combat* offers a baseline set of MOUT factors to start from.³ Its analysis identified "the dominant factors historically affecting the course" of 22 selected urban battles that occurred between 1942 and 1982. Table 4 lists the battles. As the authors note, the careful selection of these 22 battles made their dataset too small to make unassailable conclusions, but it was big enough to vary some important parameters. For example, they wanted their cases to cover a variation of attacker and defender victories, large and small cities, limited and general wars, duration of conflict, and the presence of air and naval support. Thirty-two percent of the cases occurred during World War II; 45 percent took place between 1975 and 1982. The authors looked for cases that included the employment of airpower by at least one side, large cities, and at least battalion-strength engagements.

Some of the main points of the report were the following:

- American forces should avoid cities where it is feasible.
- An attacker should encircle and isolate a city when possible.
- Airpower's important role is to cut off the city defenders from sources of supply and reinforcements.
- Armor has a definite role in MOUT. Armor and APCs must have dismounted protection, however.
- Self-propelled artillery can be used to great effect as a direct-fire weapon in close combat.
- Airpower and artillery can have a positive psychological effect.
- The defender has a "good chance to win or at least prolong the battle and raise the cost for the attacker" if casualties and/or collateral damage can be limited.
- Combined arms operations have the best chance of success, especially when armor, infantry, and artillery train and develop doctrine together.

 $^{^3}$ Modern Experience in City Combat was intended to update lessons learned about MOUT from as recent a period as possible at the time of writing (1987).

Table 4 **Baseline MOUT Cases**

Battle	Year	Force Ratio (attacker: defender)	Duration of Combat (days)	Limited or Unlimited?	"Winner"
Stalingrad	1942 ^a	2:1	>30	U	Defender
Ortona	1943	3:1	6-13	U	Attacker
Aachen	1944	1:3	14-30	U	Attacker
Arnhem	1944	1.5:1	6-13	U	Defender
Cherbourg	1944	3:1	6-13	U	Attacker
Berlin	1945	4.5:1	14-30	U	Attacker
Manila	1945	2.5:1	14-30	U	Attacker
Seoul	1950	3:1	6-13	U	Attacker
Jerusalem	1967	1.5:1	2-5	L	Attacker
Hue	1968	4:5	14-30	U	Attacker
Quang Tri I	1972	3:1	6-13	U	Attacker
Quang Tri II	1972	3:5	>30	U	Attacker
Suez City	1973	1:5	<1	U	Defender
Ban Me Thout	1975	7.5:1	1–2	U	Attacker
Beirut I	1975	5:3	>30	L	Draw
Tel Zaatar	1976	1:1	>30	L	Attacker
Ashrafiyeh	1978	10:1	>30	L	Defender
Khorramshahr	1980	4:1	14-30	U	Attacker
Zahle	1981	15:1	>30	L	Defender
Beirut II	1982	3:1	>30	U	Attacker
Sidon	1982	4:1	2–5	U	Attacker
Tyre	1982	4:1	2–5	U	Attacker

^aAugust to November only.

SOURCE: McLaurin et al. (1987), p. 94.

- Planning and intelligence are crucial to the outcome. Most defender "wins" were due to attacker intelligence failures.
- Preparation of the city was probably most critical for defender success.
- In no single case did casualties in the city itself alter the campaign outcome.

Overall, the 22 cases did not suggest any clearly emerging patterns in MOUT. Table 5 summarizes the major factors from the *Modern Ex-* *perience in City Combat* research and compares them to this monograph's conclusions.

THE CHANGING FACE OF URBAN OPERATIONS

The political environment of urban operations has changed in several ways in recent years. Just as nuclear weapons introduced new limitations on the use of force after World War II, recent changes in the media, political justification, a growing abhorrence of violence, and evolving standards of morality have increased the restraints on the use of military force in urban operations today. For the United States, military operations are now characterized by greater concern over public opinion, casualties of all sorts (including friendly, noncombatant, and even enemy casualties), and humanitarian issues.

News reporters are present on the battlefield in greater numbers than ever before.⁵ Peace operations in cities are particularly easy for reporters to gain access to. In addition, because of the proliferation of smaller, more portable media devices, information technology is altering the political landscape of the battlefield.⁶ Violence must be applied in a more discriminate manner because even the most minor

⁴The abhorrence is at least felt by the people of advanced market democracies. In the modern postindustrial age, life expectancies are up, even the middle class is enjoying unprecedented prosperity, and war is increasingly considered barbaric and uncivilized. Young men are avoiding the military and opting for the less rigorous life of an increasingly productive economy. Recent "Nintendo" wars such as the Persian Gulf War have led to unrealistic expectations that war no longer has to be bloody. Some scholars observe that the norms governing attacks on cities have evolved substantially since World War II, especially with the additional restrictions contained in the Additional Protocols of 1977 to the Geneva Conventions of 1949. See Matthew C. Waxman, "Siegecraft and Surrender: The Law and Strategy of Cities as Targets," *Virginia Journal of International Law*, Virginia Journal of International Law Association, Vol. 39, Number 2, Winter 1999, pp. 400–406.

⁵Charles Rick notes that only nine civilian war correspondents were present on the Island of Tarawa in the South Pacific in 1943 and fewer than 30 on the beaches of Normandy in 1944. "The 600 reporters in the entire Pacific Theater in World War II were nearly matched by the 500 journalists who quickly appeared on tiny Grenada and in Panama City." See Charles Rick, *The Military–News Media Relationship: Thinking Forward*, Carlisle Barracks, PA: U.S. Army War College, 1993, p. vi.

 $^{^6\}mathrm{Information}$ technology includes data processing and telecommunication technologies.

Table 5

Z	MOUT Factors from Modern Experience in City Combat Viewed from Today's Perspective	bat Viewed from Today's Perspective
Factor	Past Description and Conclusions (based on 22 cases)	Present Conclusion (based on 3 cases)
Intelligence	A major consideration, usually attacker lost because of intelligence failures.	No significant change, still a crucial but elusive factor; HUMINT still more important.
City size and composition	Dictates location of defensive strongpoints.	Cities generally larger, operations more likely to be conducted in Third World shantytowns.
Airpower	Important for interdicting supplies and reinforcements into urban area; bombing ineffective.	No significant change—best used in more open areas or in isolating smaller towns and villages; weather still a factor; PGMs still not decisive; proliferation of RPGs and man-portable SAMs now a threat to rotary aircraft.
Force size, force ratio	Insufficient troop strength prevents encirclement of the city; if 4:1 advantage exists, attacker can win within two weeks on average.	Superior force ratio still crucial to encirclement but it is more elusive given the size of modern cities and conventional armies; generally less than 4:1 (attacker/defender) in present cases.
Surprise	Heavily linked to intelligence; tactical surprise by attacker can preempt defensive preparation.	No significant change—surprise does not seem to be more or less likely now.
Offensive tactics	Combined arms teams (infantry mixed with armor, artillery, or engineers) used with great success. Isolation of the defender rarely achieved completely, but it usually led to success.	No significant change—combined arms teams still the most effective force in MOUT. Isolation of the defender still important but unlikely in high-intensity MOUT because of the growth in city size and ongoing force structure cuts; not relevant to surgical and precision MOUT. Tactics have changed with regard to the use of noncombatants.

Table 5—continued

Factor	Past Description and Conclusions	Present Conclusion (based on 3 cases)
Defensive tactics	Mobile defense most successful; however, most MOUT centered around defensive strongpoints on avenues of approach. Defender reentry into cleared buildings was effective. Preparation of the city is most important.	No significant change—"swarming" anti-tank/anti-aircraft teams a new threat; tactics have changed with regard to the use of noncombatants.
Armor and artillery	Need infantry protection; best for isolating cities and direct-fire role. Both armor and artillery decisive in earlier battles (1945–1967) and less so in later period (1968–1982).	No significant change—more lethal man-portable antitank weapons and swarm tactics now a threat. ROE now prohibit armor and artillery in some cases.
ROE or "constraints"	Present in some battles, especially for cultural reasons (Jerusalem); defender has at least an equal chance to win if limitations to friendly or noncombatant casualties exist.	Significant change—ROE restrict the use of combined arms teams and airpower; ROE generally more restrictive because of the presence of the media and noncombatants
Noncombatants	In most cases civilians managed to evacuate battle zones or they were ignored. Civilians were used as hostages on occasion (Manila, Sidon, Tyre, Beirut II). In no single case did casualties in the city itself alter the overall campaign outcome.	Significant change—noncombatants now used for human shield tactics, intelligence, cover, and concealment.
Media	Not critical; noted, however, for contribution toward the "strategic implications" of urban operations.	Significant change—media now a PSYOP tool, part of an integrated political-military strategy to erode U.S. popular support.
Public affairs	Not identified as an important factor.	Significant change—influenced the outcome in all three cases.

Table 5—continued

Present Conclusion (based on 3 cases)	Significant change—influenced the outcome in all three cases.	Whether a battle was a win or not depends on the objective one is concerned with. Political constraints—such as ROE—can restrict tactics. Significant change stemming from the synergies of information-related factors such as PSYOP, civil affairs, public affairs, ROE—and control of the media and noncombatants.	Significant change—influenced the outcome in all three cases.
Past Description and Conclusions	Not identified as an important factor.	Whether a battle was a win or not depends on the objective one is concerned with. Political constraints—such as ROE—can restrict tactics.	Not identified as an important factor.
Factor	Civil affairs	Political- military strategy ^a	Information operations (PSYOP, IW, EW)

NOTES: McLaurin et al.'s factors are in italics. Five additional factors are added here for consideration: media, public affairs, civil affairs, political-military strategy, and information operations. The factors in the shaded rows have undergone the most change in the last decade (based on the three cases in this monograph).

A few other factors from *Modern Experience in City Combat* are not listed here—such as force structure, weather, and proximity to trafficable waterways—because they were not elaborated upon in that report or are subsumed by other factors already listed.

^a Modern Experience in City Combat lists the closest comparable factors as "role of the battle in the campaign" and "objectives."

acts of violence can be broadcast to millions of voters.⁷ The more people with portable commercial equipment, the greater the chance that battlefield drama will be recorded. Political constraints on the use of military force have increased because democratically elected leaders are loath to expose voters to the brutal images of war. Today, uncensored information can be provided to the public in near-real-time, video form.⁸ Video footage of the mutilated, naked American corpse being dragged through the dusty streets of Mogadishu in October 1993 serves as one example of a media event that prompted a public outcry.

There seems to be a greater concern over noncombatant casualties than in the past, especially when the media are present. Tolerance levels are changing because the new weapons are believed to be more surgical. Adversaries have tried to capitalize on this sensitivity to bloodshed. The human shield tactics witnessed recently in Iraq and the Balkans prevented the use of airpower when civilians positioned themselves on strategic targets like bridges. When NATO bombs hit a convoy of refugees in Kosovo in 1999, some of the first Serbs on the scene were armed with cameras.

War is now sometimes justified on moral or humanitarian grounds rather than serious national security interests. ¹⁰ For example, in

⁷The cumbersome television satellite equipment which had to be transported on aircraft pallets to Panama in 1989 can now be carried in a few small cases (Rick, *The Military–News Media Relationship*, p. 15). The equipment needed for a live feed can now be handled by a two-man crew carrying less than 100 pounds in two cases (digital camera, wideband cellular phone, satellite dish, and laptop computer). See Captain Scott C. Stearns, "Unit-level Public Affairs Planning," *Military Review*, December 1998–February 1999, p. 24. Also, the proliferation of cheap digital movie-making technology is creating more opportunities for information warfare and deception. For a total of about \$4,000, a combination of a new digital camcorder, special software, and a mid-range PC puts the power to make VHS-quality movies in the hands of the general population.

⁸One wonders whether the Vietnam War might have ended sooner if all recent telecommunication advances—digital camcorders, digital satellite phones, faxes, and commercial imaging satellites—had been present in the 1960s. How many of those 50,000 American casualties would have been tolerated before political pressure brought the war to an earlier halt? What if millions of Americans had been able to download and play a video of the My Lai massacre on their home computers?

⁹Video and still images seem to increase the shock value of violence.

 $^{^{10}}$ The most recent grand strategy statement by the White House in December 1999, *A National Security Strategy for a New Century*, lists three types of national interests:

March 1999, President Clinton announced that Operation Allied Force, the NATO attack on Yugoslavia, was launched because the United States had a "moral imperative" to save the ethnic Albanians from Milosevic's ethnic cleansing campaign. This more altruistic concept of national interest has been called "the Clinton Doctrine." 11 There is a growing body of international law that permits armed intervention for humanitarian purposes even without specific UN approval.12

When military action is conducted for less-than-vital national security interests, political support at home may be more fragile and susceptible not only to casualties but also to enemy information operations.¹³ Humanitarian missions are generally prolonged interventions in complex political environments characterized by civil conflict, where U.S. interests are less compelling, if they are clear at all. Studies have shown that the U.S. public is willing to accept loss of life only if the interests and values are judged important enough.¹⁴ Operations built upon tenuous political-military links—

vital interests (vital to national survival), important national interests (which affect the character of the world in which we live), and humanitarian and other interests. Official policy clearly states that military force is justified if "our values demand it." See page 6 of the document.

¹¹It remains to be seen whether future administrations will be willing to commit U.S. military force for humanitarian purposes.

 $^{^{12}}$ International law consists of provisions of the UN Charter, treaties, and activities and practices that have won broad acceptance over the years. Norman Kempster, "Leaders and Scholars Clash Over Legality," Los Angeles Times, March 26, 1999.

¹³One illustrative example is Operation Allied Force (OAF) in 1999. Recognizing that political support is more sensitive to casualties when military action is conducted for less-than-vital national security interests such as a "moral imperative," the Serbs sought to raise the human and moral costs of conflict in order to erode the will of the American people. They tried to raise the human cost by inflicting as many American casualties as possible; at the same time, by increasing the number of noncombatant deaths from NATO bombs, they tried to undermine NATO's moral justification for the use of force.

¹⁴For example, Larson reports that support for the humanitarian operation in Somalia fell 10 points after the firefight in October 1993 (it had already declined 35 points even before the fight). In contrast, public support for the invasion of Panama remained high even after casualties were incurred because of President Bush's argument that Americans were in danger in Panama. See Larson, Casualties and Consensus, pp. 41, 50.71.

low-value political goals that require high costs—are vulnerable to enemy strategies aimed at domestic public opinion. ¹⁵

The recent MOUT cases in this study may also reflect a larger trend in the nature of war—that is, armed conflict is more likely to involve low-intensity forces because the spread of weapons of mass destruction deters high-intensity conventional war. ¹⁶ If this is true, the wars of the future will probably look more like the Mogadishu firefight and less like the desert tank battles of the Persian Gulf War. Third World conflicts usually involve additional political constraints on the use of military force. ¹⁷ The risk of lengthy stalemate is higher in low-intensity conflicts, so mounting casualties tend to serve as a lightning rod for public dissatisfaction. ¹⁸

 $^{^{15}}$ In the Somali case, the benefits were never perceived by most to have warranted much loss of life. 60 percent of those polled by $\it Time/CNN$ on October 7, 1993, agreed with the statement that "Nothing the United States could accomplish in Somalia is worth the death of even one more soldier." See Larson, $\it Casualties \ and \ Consensus, \ p.$ 47.

¹⁶One of the scholars who argue this is Martin Van Creveld. In his book, *The Transformation of War*, he argues that the use of armed force as an instrument for attaining political ends by major states is less and less viable because of the presence of nuclear weapons. Although the book was published at an unfortunate date (just before the onset of the Persian Gulf War), it does raise several telling points. In every volatile region where conventional wars used to be fought (such as the Middle East, South Asia, and China's periphery), the introduction of nuclear weapons has coincided with a marked decline of conventional war. The new dominant form of war is low-intensity conflicts (LICs). Since 1945, about three-quarters of the 160 armed conflicts worldwide have been nonconventional or of the "low-intensity" variety. Van Creveld argues that LICs have also been more politically significant than conventional wars, in terms of both casualties and territorial boundaries. What's more, the major states involved have lost the vast majority of these wars. Because conventional military power—hightech tanks, artillery, airpower, etc.—is all but useless against insurgents, he hypothesizes that the rise of LIC will render the military forces of major states irrelevant.

¹⁷Constraints have shaped and limited U.S. policy and strategy in the Third World since the start of the nuclear era. One analysis of the Korean War, the Cuban Missile Crisis, and the Vietnam War concluded that U.S. constraints were motivated by several concerns: to avoid direct military conflict with the USSR, to avoid friendly and enemy civilian casualties, to limit U.S. casualties, and to accommodate U.S. allies. See Steve Hosmer, *Constraints on U.S. Strategy in Third World Conflict,* Santa Monica, CA: RAND, R-3208-AF, 1985.

¹⁸On the basis of poll data and extensive interviews, Mark Lorell and Charles Kelley concluded that casualties were the single most important factor eroding public support in limited wars in the Third World. See Mark Lorell and Charles Kelley, *Casualties, Public Opinion, and Presidential Policy During the Vietnam War,* Santa Monica, CA: RAND, R-3060-AF, 1985, p. vii.

Insurgent forces generally seek to avoid warfare on open ground where the airpower and other sophisticated weapon systems of the United States can be brought to bear. Urban operations are one way to do this. The urban environment offers not just physical cover and concealment but also political cover behind noncombatants. By seeking to inflict as many casualties as possible, the weaker state can follow an asymmetric strategy that concentrates on subduing the will to fight of the American people rather than defeating American military forces. 19 The classic guerrilla strategy—to win by not losing can create the impression that U.S. forces are fighting in a quagmire, which diminishes the prospects for success in the eyes of the public.

In short, all of these political, technological, and social developments increase the importance of information operations (and related activities) during urban operations (see Figure 3). Information operations focus on the perception and will of the people fighting the war, the support of the domestic population at home, as well as the support of the indigenous population in the urban operations theater. More opportunities exist than ever before to subdue the will of the enemy through information manipulation (in addition to destroying his military forces).

The geostrategic problem for the United States is to figure out how to (1) subdue the will of the enemy in conflicts involving less-than-vital interests while (2) maintaining popular support from the American people. The former can be achieved by killing the enemy and by controlling information. The latter can be achieved by minimizing casualties, exercising political leadership, and controlling information.

Before proceeding further, the official doctrinal language of information operations (IO) should be outlined and defined.²⁰ For the

 $^{^{19}}$ During OAF, even the common Serb on the street realized that the objective was to raise the cost of military action beyond the U.S. public's threshold of tolerance. As one Serb said, "Clinton didn't succeed in Somalia when they were killing Americans on the street. We will do the same. The people who fall from the plane: We will find them.' See David Holley, "Serbs Rally Around Their Leader," Los Angeles Times, March 26, 1999.

²⁰These are Joint Staff and Army definitions. See Joint Doctrine for Information Operations, Joint Pub 3-13, 9 October 1998; Joint Doctrine for Command and Control Warfare (C2W), Joint Pub 3-13.1, 7 February 1996; Doctrine for Joint Psychological



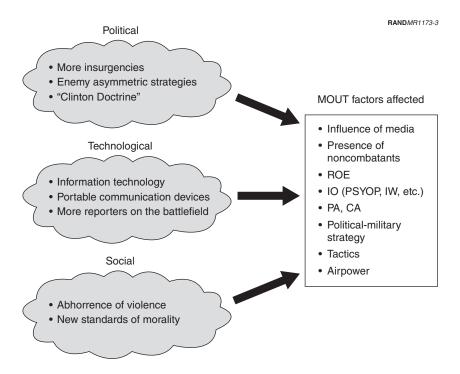


Figure 3—The Changing Environment of Urban Operations

purposes of this discussion, information operations involve actions taken to affect the adversary's information and information systems and to defend one's own.²¹ Ultimately, IO is designed to influence the enemy's emotions, motives, reasoning, and behavior. IO at the strategic level of war includes influencing all elements of an adversary's national power (military, political, economic, and informa-

Operations, Joint Pub 3-53, 10 July 1996; and *Public Affairs Operations*, Field Manual (FM) 46-1, Department of the Army, 30 May 1997.

²¹A subset of IO is information warfare (IW). IW is information operations during a time of crisis designed to achieve specific goals over a specific adversary. A subset of IW is command and control warfare (C2W). C2W is an application of IW in military operations that specifically attacks and defends command and control targets.

tional).²² At the operational level, IO focuses on lines of communication, logistics, and command and control to achieve campaign objectives. Tactical-level objectives are met through IO attacks on adversarial information-based processes directly related to the conduct of military operations.²³

The basic components of offensive IO include psychological operations (PSYOP), electronic warfare (EW), physical attacks, deception, special information operations (SIO), and operational security (OPSEC) (see Figure 4).²⁴ Public affairs (PA) and civil affairs (CA) are *information-related* activities.²⁵

PSYOP are actions taken to convey selected information to foreign audiences. PSYOP targets the will and morale of enemy combatants and noncombatants and may support military deception. A classical example is to drop propaganda leaflets over target populations. EW is any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or attack the enemy. Physical attack is self-explanatory. SIO are information operations that, by their sensitive nature, require a special review and approval process. OPSEC denies the adversary critical information

²²Some authors have postulated that another way information exerts power today is at a strategic-cultural level. Joe Nye calls this "soft power," the power that cultural influences have on foreign populations. "Soft power" is co-optive power, or the ability of a country to structure a situation so that other countries develop preferences or define their interests in ways consistent with their own. Political leaders have long understood the power of attractive ideas or the ability to set the political agenda and determine the framework of debate in a way that shapes others' preferences. The rest of the world indirectly conforms to American ideals because of the globalization of American culture (American films, for example, account for only 6–7 percent of all films made but occupy about 50 percent of world screen time) and the U.S. monopoly on many aspects of the information revolution (in 1981 the United States was responsible for 80 percent of worldwide transmission and processing of data). See Joseph S. Nye, Jr., and William A. Owens, "America's Information Edge," *Foreign Affairs*, Vol. 75, No. 2, March/April 1996, p. 21.

²³For our purposes, the discussion will concentrate on the more strategic applications of IO that influence populations and national will, not necessarily C2W actions concerned with disrupting C2 systems.

²⁴Defensive IO primarily protect and defend information and information systems. Defensive IO activities include information assurance, OPSEC, physical security, counterdeception, counterpropaganda, counterintelligence, EW, and SIO. See *Joint Doctrine for Information Operations*, Joint Pub 3-13, October 9, 1998, for more details.

 $^{^{25}\}mbox{Normally}$ a Joint Force Commander would set up an IO cell that contains representatives from all the above elements.

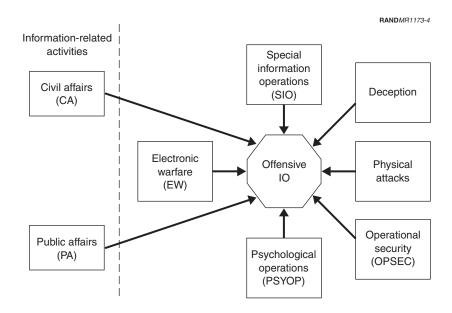


Figure 4—Information Operation Components and Related Activities

about friendly capabilities and intentions needed for effective decisionmaking. Military deception targets adversary decisionmakers through effects on their intelligence collection, analysis, and dissemination systems. Deception induces misperception; ultimately, the target is "the human decisionmaking process." ²⁶

Public affairs and civil affairs are related activities that target the U.S. population (and media) and indigenous population respectively. PA keeps the U.S. public and armed service personnel informed as to military goals and current operations while countering any disinformation spread by the enemy. The PA motto is maximum disclosure with minimum delay. CA encompasses activities that a commander takes to establish relations with civil authorities and the general population where his forces are deployed. CA and PA both complement PSYOP.

²⁶See Scott Gerwehr and Russell Glenn, *The Art of Darkness: Deception and Urban Operations*, Santa Monica, CA: RAND, MR-1132-A, 1999.

All of these IO-related elements may be more effective in future urban operations because of the political, social, and technological developments described earlier. The "traditional" factors drawn from urban operations in the past—intelligence, armor, airpower, etc. remain crucial for the goal of killing the enemy and minimizing U.S. casualties. But the factors crucial to information operations—ROE, PSYOP, public and civil affairs, information warfare, and a politicalmilitary strategy that integrates these efforts—are growing in significance and deserve more attention. This is especially true for counterinsurgency operations that aim to gain the support of the local population. For example, it may be possible to persuade a city population to stop supporting indigenous soldiers (and even expel them. as the citizens of Gudermes in Chechnya did in November 1999).

Influence charts might help the reader visualize these seemingly disparate elements. Figure 5 is a simple influence chart that shows the framework through which both physical attacks and information attacks can affect the will to fight (shown from a U.S. perspective). It is one snapshot to illustrate how information manipulation might occur. One can picture the process as a flow.

A political-military strategy must consist of *goals*, a *means* to achieve them, and ways, a plan or a method for applying the means. Goals that are explicitly defined and justified for the public help stabilize domestic support in the face of casualties. Polling data show that the public becomes less tolerant of casualties when the prospects for success are low, when the perceived benefits do not justify high costs, or when there is a lack of consensus among political leaders.²⁷ Political consensus over policy leads to more favorable media coverage. Indeed, media reporting is often *indexed* to the tone of the leadership debate—in other words, media reporting will generally be favorable if most leaders and experts support a policy, and negative if they are critical of the policy.²⁸

²⁷See Larson, Casualties and Consensus, pp. xv-xviii.

²⁸See Daniel L. Byman, Matthew C. Waxman, and Eric Larson, Air Power as a Coercive Instrument, MR-1061-AF, 1999, p. 69.

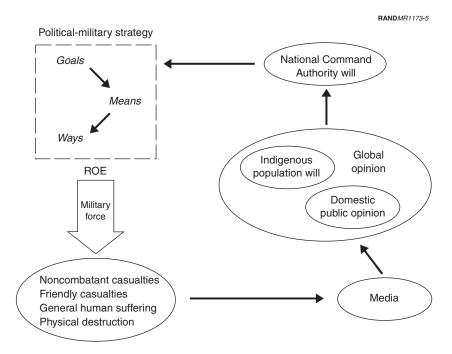


Figure 5—Influence Chart of Political-Military Links

When domestic political constraints are incorporated into the political-military strategy, ROE result. ROE shape how military means are applied, which in turn influences the number of friendly and noncombatant casualties and collateral damage. More restrictive ROE can increase the risk of friendly casualties.²⁹ In every mission, it is important to ask what the ROE are and whether the

²⁹For example, ROE during Operation Deliberate Force increased the risk to pilots. Special instructions were issued to aircrews, for example: (1) those attacking a bridge must make a dry pass over the target and attack on an axis perpendicular to it, releasing only one bomb per pass. (2) Those carrying out suppression of enemy air defense (SEAD) strikes were not authorized without special approval to conduct preemptive or reactive strikes against surface-to-air missile sites except under certain restrictive conditions. See unpublished manuscript by Alan Vick, John Stillion, David Frelinger, Joel S. Kvitky, Benjamin S. Lambeth, Jeff Marquis, and Matthew C. Waxman, "Exploring New Concepts for Aerospace Operations in Urban Environments," November 1999, p. 60.

mission can still be accomplished with acceptable losses. In extreme cases, the ability of U.S. forces to overcome an opponent may be limited more by the political constraints embodied in ROE than by the enemy's military capability.³⁰

The application of military force can result in noncombatant and friendly casualties, human suffering, and physical destruction, all of which are subject to media scrutiny. People are informed of these costs of war, the impact depending in part on the level of media access.31 When events are closely monitored by the media, even minor tactical events can have strategic outcomes. There are compelling data showing that public support for war declines as friendly casualties increase.32

Media coverage of these costs of war and any attendant political debate influences U.S. public opinion, the will of the indigenous population in the theater of operations, and global opinion. A shift in public support can influence to some degree the national command authority's willingness to continue risking the lives of U.S. soldiers.³³ If the human costs of achieving the current military goals

³⁰Brigadier General John R. Groves, "Operations in Urban Environments," *Military* Review, July-August 1998, p. 35.

 $^{^{31}}$ The indigenous population is directly affected by the use of military force of course.

³²There is an extensive literature on this subject. John E. Mueller's War, Presidents and Public Opinion (1973) was one of the original studies that observed the log of cumulative casualties as the best predictor of public support (based on data from Korea and Vietnam). Gartner and Segura recently found marginal casualties to be the best predictor when casualties are increasing and the log of cumulative casualties the best predictor when casualties are decreasing. See Scott Sigmund Gartner and Gary M. Segura, "War, Casualties, and Public Opinion," Journal of Conflict Resolution, Vol. 42, No. 3, June 1998, pp. 278–300. A related study argues that casualties influence the duration and outcome of wars—see Scott D. Bennett and Allan C. Stam III, "The Declining Advantages of Democracy: A Combined Model of War Outcomes and Duration," Journal of Conflict Resolution, Vol. 42, No. 3, June 1998, pp. 344–366.

 $^{^{33}}$ For the purposes of this monograph, it is assumed that adverse effects on public support are at least weighed in the decisionmaking process as additional costs, just as the other costs of military action are weighed (such as friendly casualties, international opinion, collateral damage, etc.). The proposition that public support and opinion affect the decisionmaking of the national command authority is debated endlessly in the literature (for example, see Holsti). It seems logical to assume that in many cases—especially in short crises—foreign policy decisions are made independent of public opinion because of the requirements for secrecy, speed, and flexibility. Some studies conclude that public opinion is irrelevant because analysis of polling data from past conflicts indicates the public was poorly informed and their opinions were

outweigh the perceived benefits, domestic political pressure can possibly force a change in policy, an adjustment of ROE, or termination of an operation.³⁴ It is imperative that political-military strategy keep the human costs of combat—or the awareness of those costs—under a threshold of public tolerance.

This basic framework has not changed fundamentally, but the opportunities for IO and the ability to influence an opponent's will to fight are increasing. News also appears to travel much faster in the information age.

The influence of the media is potentially more powerful now because television coverage of wars is more extensive and noncombatants are more prevalent in urban environments.³⁵ The Persian Gulf War has been called the "mother of all media events": television transmitted 4,383 stories of the crisis over a seven-month period.³⁶ In the ever brighter media glare, an increasing presence of noncombatants on the battlefield is significant because the death of women and children can strike deep emotional chords with the public.

volatile and lacked structure and coherence. Since many institutions shape, mobilize, and transmit public sentiment, such as the media, special interest groups, and legislators, appropriate indicators of public opinion are sometimes not even readily apparent.

³⁴For example, during the Persian Gulf War, pictures of 300 civilian dead in the aftermath of the U.S. bombing of an Iraqi bunker in Baghdad (which was also being used as an air raid shelter) led to future restrictions on bombing of targets. Jeremy Shapiro, "Information and War: Is It a Revolution?" in Zalmay M. Khalilzad and John P. White (eds.), *Strategic Appraisal: The Changing Role of Information in Warfare*, Santa Monica, CA: RAND, MR-1016-AF, 1999, p. 125.

³⁵In World War II, the media consisted of print reporters like Ernie Pyle. Public access to the horror of war was limited, censored, delayed, and in the form of print and still images. The dirty underbelly of war—atrocities, mutilations, graphic carnage—was generally less visible. In the Vietnam era, there were no all-news cable channels. Live pictures of combat were unheard of because correspondents had to physically transport their film to the airport so it could be flown to New York. The newscast would appear two or three days later. In the 1990s, information was provided to the public in real time, in video form, and often uncensored.

³⁶John E. Mueller, *Policy and Opinion in the Gulf War*, Chicago: University of Chicago Press, 1994, p. xiv. For comparison, just before and during the Tet offensive there were 187 television stories on the Vietnam War between September 1967 and January 1968, and 457 television network weekday evening news reports between January 29 and March 28, 1968. Only 118 of these were supplied by newsmen actually in Vietnam. See Peter Braestrup, *Big Story: How the American Press and Television Reported and Interpreted the Crisis of Tet 1968 in Vietnam and Washington*, Boulder, CO: Westview Press, 1977, p. 41.

"Media manipulation" is included in Figure 6, even though this remains a troublesome concept because it implies denial of the free press. Current doctrine states that PA officers should not manipulate public opinion but seek to disclose as much as possible as soon as possible.³⁷ Military commanders may have some control over media access, but this will be difficult in cities, and the more so during humanitarian operations. However, there are subtle and indirect ways in which the media may be influenced that go beyond the straightforward mission of public affairs units, without undermining the credibility of the military for honesty.³⁸ Press pools are useful for restraining reporters on the battlefield. Reporters can also be "inadvertently" delayed, steered away from certain areas, assigned to certain units, etc. The military can try to shape the public's perception of events by selectively releasing information to the media that promotes its agenda, such as video footage of high-precision bombs in action.³⁹ Extolling the virtues of high technology downplays the human costs of combat.

An effective political-military strategy integrates all the information tools available (PSYOP, PA, CA, and IW) and the media to influence the battle of wills. There are mutually reinforcing relationships even synergy—between many of these elements. For example, coordination between public affairs, civil affairs, and psychological operations results in a focused message for managing the perception of the indigenous population in the area of operations. PSYOP and civil affairs units help remove noncombatants before a battle commences (thereby lowering possible noncombatant casualties) and increase HUMINT.⁴⁰ PA and CA units interact with the media.

³⁷Without violating operations security, of course.

³⁸Honesty is important because truth builds credibility with the target audience. See Major Mark R. Newell, "Tactical-Level Public Affairs and Information Operations," Military Review, December 1998–February 1999, p. 23.

³⁹For example, during the Gulf War, images of Patriot missiles knocking Iraqi Scuds out of the nighttime sky over Tel Aviv created a public perception of the wonders of American military technology, persuaded the Israelis to refrain from attacking Iraq, and allayed the fears of the Israeli population. Subsequent studies demonstrated that the Patriot may have failed to hit a single target during the course of the entire war.

⁴⁰HUMINT is more available if friendly forces can gain the support of the civilian population. For support and stability operations in particular, it is critical that the support of the indigenous population be targeted through the proper use of ROE, the media, and PSYOP. Roger Trinquier and others have argued that control of the popu-

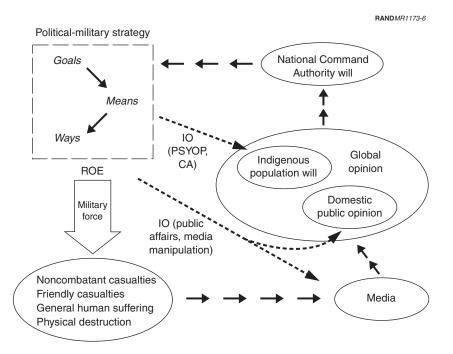


Figure 6—Influence Chart with IO

ROE can affect PA, CA, and PSYOP. Permissive ROE can precipitate civilian casualties, which attracts more media. Overly restrictive ROE cause friendly casualties. Some ROE—like graduated response approaches that use loudspeakers, warning shots, and firepower demonstrations—have PSYOP implications. IO tools can also maintain public support in the United States in the face of noncombatant casualties.⁴¹

lation can provide a significant advantage in urban warfare. Goligowski names several sources that recognize the importance of population control. See Goligowski, *Operational Art and Military Operations on Urbanized Terrain*, pp. 31–32.

⁴¹For example, in the Gulf War, the American public was mostly insensitive to Iraqi civilian casualties because they believed Saddam was to blame for placing military targets in civilian areas. The Bush administration effectively demonized Saddam and identified the important national security interests at stake. Seventy-one percent of those polled in February 1991 said the United States was justified in attacking military targets that Saddam had hidden in areas populated by noncombatants (*Los Angeles*

Because of the faster flow of events, a political-military strategy must also be adaptive, responding to the changing situation on the battlefield. In the city, commercial video of a firefight can reach television audiences before the military situation report (SITREP) works its way up the chain of command.

The Chechen War (1994–1996) provided a good example of how this political-military process works. A democratic state waged war for less-than-vital national interests and without the benefit of a political-military strategy focused on information operations. Permissive Russian ROE and poor CA discredited pro-Moscow political movements inside Chechnya. 42 The Russians allowed the Chechen rebels to consolidate the support of the indigenous population. Russian PA was poor and management of the media was almost nonexistent.

The Chechens, for their part, used the media and noncombatants for PSYOP. They managed to lower the morale of the Russian army and undermine Russian domestic public support for the war—and they did this to a stoic people who historically have always been willing to make great sacrifices in war.

The Chechen army was inferior to the Russian military in terms of resources. Its best recourse was to defeat the will of the Russian people by raising the cost of winning the war to an unacceptable level.⁴³ The Chechens recognized the unique opportunities that an urban operations environment offered in that regard.

Times, February 15–17, 1991); 67 percent said they thought the United States was making enough effort to avoid bombing civilian areas (ABC News/Washington Post, February 14, 1991). See Byman, Waxman, and Larson, Air Power as a Coercive Instrument, p. 78, and Mueller, Policy and Opinion in the Gulf War, p. xvii.

⁴²At the start of the war only a fraction of the Chechen population was actively hostile to Russian forces. That fraction increased as death and destruction continued to rain down from above. As the Russian national security adviser Lebed said, "When we were entering that country, 90 percent of the population were welcoming us, lining the roads, flowers in their hands. When we were withdrawing from it, we were hated by everyone." Chechens who had lost a relative were especially bad: "They became wolves." See Gall and de Waal, Chechnya: Calamity in the Caucasus, p. 348.

 $^{^{43}}$ As Clausewitz observed, wars end when one side imposes its will on the other. That occurs when either the opposing army is physically destroyed or when the willpower of the population that supports the army is influenced to stop the war. Weaker opponents who cannot achieve the former must seek the latter result. See Carl von

In the cross-case analysis that follows, the premises noted above are validated by looking at several MOUT factors in detail.

FACTORS UNDERGOING SIGNIFICANT CHANGE

Given the growing relevance of information operations, several factors appear to have grown in significance over the last decade: the presence of noncombatants, the presence of the media, ROE, PSYOP, IO-related activities such as civil affairs and public affairs, and political-military strategy.

Presence of Noncombatants⁴⁴

In recent urban operations, the presence of noncombatants significantly affected tactics, planning, ROE, and political-military strategy. Noncombatants were present in greater numbers, they played an active role in the fighting, they made ROE more restrictive, and they attracted the media.

There are a number of reasons why the number of noncombatants generally increased. Adversaries found cities a useful asymmetric avenue to face superior conventional armies. Insurgents utilized city dwellers for cover, concealment, and support. In the surgical and precision MOUT cases, there was usually no time or need for civilians to evacuate the combat zone. Even in the high-intensity case, many noncombatants remained despite the scale of destruction, and civilians wandered around Grozny throughout the fighting.⁴⁵

An increase in the presence of noncombatants created the need for more restrictive ROE. Rules of engagement were needed because the

Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret, New York: Knopf, 1993.

⁴⁴The standard definition of a noncombatant is a man, woman, or child who is not actively engaged in military-related activities and who is a civilian. Once a civilian actively engages in military activities he or she is considered a combatant according to the law of armed conflict. For the purposes of this monograph, civilian women and children are always referred to as noncombatants.

 $^{^{45}}$ About 300,000 Chechen civilians did flee Grozny during the fighting. Adam Geibel, "Lessons in Urban Combat: Grozny, New Year's Eve, 1994," *Infantry*, Vol. 85, No. 6, November–December 1995, p. 24.

indiscriminate killing of civilians provides a moral and psychological advantage to the enemy, erodes domestic and international support for the use of force, and strengthens the will to resist among the indigenous population. Also, in recent years, there has been a growing trend for victims of war to take legal action.⁴⁶

Civilians impeded operations, especially when no discriminate or nonlethal means of force was available (or considered). During the initial stages of the Chechen conflict, Russian troops obeyed orders not to kill civilians. Because Russian soldiers lacked any nonlethal means of crowd control and their ROE were not clear, Chechen civilians were allowed to blockade resupply convoys and even set fire to Russian vehicles. Unarmed civilian crowds, mostly women, slowed or halted the advance of all three armored columns approaching Grozny in December 1994. Russian IFVs were taken and reportedly handed over to the Chechens.⁴⁷ Major General Ivan Babichev stopped his advance toward Grozny because he refused to "wrap bodies round the tracks of his tanks."48

In Panama, the presence of civilians in the residential areas of Quarry Heights and Albrook Air Station required new techniques for the application of force. To try to minimize casualties and collateral damage, U.S. troops used "graduated response." First they used loudspeakers to entice the defenders into giving up without a fight. Then they put on a demonstration of AC-130 firepower nearby, threatening to move that destructive firepower onto the Panamanian position if they did not surrender immediately. The PDF soldiers either surrendered or fled.

Noncombatants played a significant role in the actual fighting during recent urban operations, especially when the conditions were right (i.e., an insurgency environment in which the population is hostile

 $^{^{}m 46}$ The case of a Panamanian woman who was killed by the collateral damage of a 2.75inch Cobra rocket became a symbol of a campaign for financial compensation for Panamanian civilian casualties. Holocaust victims have settled with the Swiss government. German companies are currently being sued in U.S. courts for their use of slave labor during World War II. The financial cost of noncombatant deaths could be substantial in the future.

⁴⁷See Lieven, *Chechnya: Tombstone of Russian Power*, p. 103.

 $^{^{48}}$ See Raevsky, "Russian Military Performance in Chechnya: An Initial Evaluation," p.

from the very start and ROE prevents the indiscriminate slaughter of civilians). Noncombatants were used for fighting, cover and concealment, and situational awareness. In these roles, noncombatants served as a useful tactical asymmetric response to superior U.S. conventional forces.

For example, during the October 1993 firefight in Mogadishu, Somali noncombatants participated directly in the fighting as fighters or scouts, or indirectly as a sort of mobile screen for Somali fighters. Armed Somalis deliberately used noncombatants for cover and concealment because they knew the Americans had been issued strict rules of engagement. Rangers were under orders to shoot only at people who pointed a weapon at them.⁴⁹

Noncombatants posed a major problem for conventional forces because they enabled the enemy to move like—to use Mao's analogy—"fish swimming in the sea." For example, Chechen snipers attacked Russian soldiers and then donned Red Cross armbands to mingle with civilians and conceal themselves. In Chechnya, it was often impossible to distinguish between noncombatants and combatants because they wore similar attire. Somali gunmen found it easy to blend into gathering onlookers, using noncombatants as cover while they moved their forces toward the helicopter crash sites. The fact that none of the clans wore uniforms or other distinctive clothing helped conceal them among noncombatants.

The practice of firing from behind women and children and using them for mobile cover and concealment was standard operating procedure for the Somalis.⁵² As a result, about a third of all Somali

⁴⁹At one point, a Ranger saw a Somali with a gun prone on the dirt between two kneeling women. He had the barrel of his weapon between the women's legs, and there were four children actually sitting on him. He was completely shielded by noncombatants. See Bowden, *Blackhawk Down*.

 $^{^{50}}$ See David Miller, "Big City Blues," *International Defense Review*, Vol. 28, Issue 3, March 1, 1995.

 $^{^{51}}$ Russian soldiers at checkpoints countered this tactic by stripping the shirts off of suspected Chechen males and looking for telltale signs of a soldier, such as rifle recoil bruises on the shoulder, gunpowder on the clothes or fingers, etc. See Thomas, "Some Asymmetric Lessons of Urban Combat."

 $^{^{52}\}rm{Even}$ as early as March 1993, in Kismayo two clans used women and children as active participants, with a mix of carefully coordinated infantry tactics.

casualties in the firefight were women and children.⁵³ The Chechens deliberately placed artillery near schools and apartment buildings to discourage Russian attacks (many of the remaining civilians were ethnic Russians).⁵⁴ Dudayev placed his air defense ZSU-23/4s in residential areas. Pavel Grachev claims that Chechens used noncombatants as "human shield" cover when attacking from hospitals, schools, and apartment blocks.⁵⁵ During the raid on Budyonnovsk, Basayev used his hundreds of hostages in the hospital siege as cover. Chechens made hostages stand at the windows of the hospital so they could fire from behind them.⁵⁶

Even if the civilian population was not hostile, noncombatants still offered cover and concealment. The OJC case fits this description in general, the Panamanian people were not overtly hostile and U.S. troops faced no large-scale uprisings or popular resistance.⁵⁷ This lack of support for Noriega made OJC much easier, but it did not prevent some PDF soldiers from using noncombatant areas as cover. For example, during the air assault on Tinajitas, 82nd Airborne troops loaded on Blackhawk helicopters took fire from PDF snipers firing from crowds of civilians. Apaches, Cobras, and OH-58s could not prepare the landing zones because of nearby civilian neighborhoods. ROE prevented return fire because civilians were in the area 58

It should be noted that both sides may have used noncombatants in Somalia. Somali evewitnesses have charged that Somali women and

⁵³See John H. Cushman, "Death Toll About 300 in October 3 U.S.-Somali Battle," The New York Times, October 16, 1993.

⁵⁴"Russia's War in Chechnya: Urban Warfare Lessons Learned 1994–96."

⁵⁵Cited from FBIS report in Thomas, "The Caucasus Conflict and Russian Security: The Russian Armed Forces Confront Chechnya, III. The Battle for Grozny, 1–26 January 1995," p. 56.

⁵⁶Gall and de Waal note that the elite Russian Alpha snipers worked as a team to fire at hostage legs to drop them before taking out the Chechen gunman. See Gall and de Waal, *Chechnya: Calamity in the Caucasus*, p. 270. The Chechens also used human shields during the Kizlyar-Pervomaiskoye raid. See John Arquilla and Theodore Karasik, "Chechnya: A Glimpse of Future Conflict?" Studies in Conflict and Terrorism, Vol. 22, No. 3, July-September 1999, p. 220.

⁵⁷See Jennifer Taw, Operation Just Cause: Lessons for Operations Other Than War, Santa Monica, CA: RAND, MR-569-A, 1996, p. vii.

⁵⁸See Donnelly, Roth, and Baker, *Operation Just Cause*, p. 226.

children were held as "hostages" by the Americans in four houses along Freedom road during the firefight, which prevented Giumale from using his 60mm mortars to bombard and destroy the American position around the Super 6-1 site during the night.⁵⁹

Noncombatants complicated urban operations planning. For example, in Operation Just Cause, both American and Panamanian noncombatants were present. The families of U.S. soldiers stationed in Panama—as well as tens of thousands of other U.S. citizens throughout Panama City—needed to be secured and evacuated. Early planning for this contingency was called *Klondike Key*, also called a "noncombatant evacuation operation (NEO)."⁶⁰ Often noncombatants appeared unexpectedly during the operation, and extra resources had to be diverted from the primary mission to take care of them. At the Torrijos International Airport in OJC, the unexpected presence of 376 civilian airline passengers complicated the Ranger mission, resulting in several hostage crises. During the Fort Cimmarron assault, dozens of Americans at the Caesar Park Marriott hotel were held hostage temporarily by PDF gunmen in civilian clothes,⁶¹

Rules of Engagement

ROE influenced how military force was applied, which in turn determined friendly and noncombatant casualties. Constructing and managing flexible ROE so that they were neither too restrictive nor too permissive was critical for a successful political-military strategy that targeted the will of the enemy. In recent urban operations, balancing ROE proved to be difficult, especially in the high-intensity case. When improper ROE resulted in excessive civilian deaths and collateral damage, other MOUT elements such as the media and enemy IO gained useful ammunition for their respective interests. ROE

 $^{^{59}}$ U.S. officers disputed the notion that Somali mortars would have wiped out Task Force Ranger because U.S. anti-mortar radar and Little Bird gunships loitering overhead would have destroyed any mortar crew after firing one or two rounds. See Atkinson, "Night of a Thousand Casualties," p. A11.

⁶⁰See Donnelly, Roth, and Baker, Operation Just Cause, p. 24.

⁶¹In most cases, the hostages were eventually released unharmed. However, one unfortunate American, Raymond Dragseth, was executed with a bullet to the back of his head. See Donnelly, Roth, and Baker, *Operation Just Cause*, p. 230.

also affected tactics and prevented the use of armor, artillery, and airpower on occasion.

ROE tightened the connection between politics and military tactics. Clausewitz's famous statement that "war is merely the continuation of policy by other means" has even more relevance for urban operations because of the heavier political pressure inherent in MOUT.⁶² As a result, MOUT tactics, techniques, and procedures (TTPs) sometimes conformed to a political logic more than a military logic (at least before excessive casualties began to occur).

On at least one occasion heavy-handed political considerations created a military disaster. 63 The balance between restrictive ROE and permissive ROE needed to be tailored to reduce noncombatant casualties and general human suffering yet also avoid compromising the safety of friendly forces. For the MOUT commander, an ROE tradeoff always existed: either restrict the use of airpower, artillery, and armor and accept higher infantry casualties as a result, or allow heavier weapons to inflict collateral damage and noncombatant casualties.

The problem of how to balance ROE was not new. Historically speaking, conventional forces in the past often started with restrictive ROE that prevented the use of heavy firepower, but were forced to relax the ROE once unacceptable numbers of friendly casualties were taken.⁶⁴ Chechnya continued that trend. Before the December 1994 assault into Grozny, the Russian defense minister, Pavel Grachey, promised that no tanks or artillery would participate in the attack. President Yeltsin announced on Russian TV that

 $^{^{62}}$ Clausewitz's dictum that military force is a means toward a political end appears to remain true. However, some authors argue that future opponents of the United States may not fight for political ends but for moral, religious, or existential ends. See Chapter 5 of Martin Van Creveld, The Transformation of War, New York: Free Press,

 $^{^{63}}$ The political demands for a quick victory in the Chechen War was a major reason why the initial assaults on Grozny were such a disaster. The rushed job led to poor planning, a commitment of undermanned and unready troops, and a reckless mechanized drive straight into the center of an ambush.

⁶⁴Captain Kevin W. Brown makes this point, using Manila (1945), Seoul (1950), Hue City (1968), Panama City (1989), and Somalia (1993) as historical examples. See Captain Kevin W. Brown, "Urban Warfare Dilemma—U.S. Casualties vs. Collateral Damage," Marine Corps Gazette, Vol. 81, No. 1, 1997, pp. 38–40.

For the sake of saving people's lives I have given instructions that bombing strikes which could lead to fatalities among the civilian population of Grozny be ruled out. 65

Grachev later stated that "local inhabitants, taking advantage of the fact that servicemen could not use violence against the peaceful population, have been dragging [Russian] troops out of their vehicles." ⁶⁶ Restraint on the use of force was abandoned after unsupported infantry began taking heavy losses. As one Russian general put it,

They want me to fight without artillery and aviation. So as to be humane. But I can't send soldiers into battle like that! Without preparing the ground for them.⁶⁷

The Russians relaxed their ROE, allowing artillery and airpower to damage nearly every heavy building in Grozny (with the exception of some suburbs). Grachev used more tanks because "there was no other way."

Restrictive ROE lowered combat effectiveness, put lives in danger, and fostered a sense of frustration and lower morale. The need for political restraint on the use of violence was easy for a scholar of Clausewitz to understand but less appreciated among teenage soldiers who were putting their lives in jeopardy.

If ROE stripped away key equipment and firepower, soldiers were forced to fight with unfamiliar tactics. Restrictive ROE that kept units from using combined arms assault groups most likely caused more casualties. Urban warfighters were trained to work in combined arms teams, usually with tanks or infantry fighting vehicles attached to infantry units. In Somalia, the 10th Mountain Division learned upon its deployment that it could not use its artillery.⁶⁹ Artillery

⁶⁵Stated on December 27, 1994.

⁶⁶Quote from Thomas, *The Caucasus Conflict and Russian Security*, p. 34.

⁶⁷See Serdyukov, "General Pulikovskiy: Fed Up!"

 $^{^{68}}$ "Russian Military Assesses Errors of Chechnya Campaign," *International Defense Review*, Vol. 28, Issue 4, April 1, 1995.

 $^{^{69}\}mathrm{LTC}$ T. R. Milton, Jr., "Urban Operations: Future War," *Military Review, February* 1994.

pieces often blast entry and exit holes for infantry to use, which avoids the use of doors and windows that may be booby trapped or covered by fire. ROE can also strip away close air support, attack helicopters, and many other crew-served weapons. These heavier weapons are useful not only for suppression and destruction of enemy strongpoints, but also for urban maneuver. AC-130 gunships were not available for close air support on October 3rd because their previous employment had resulted in too much collateral damage. As General Colin Powell put it, "they wrecked a few buildings and it was not the greatest imagery on CNN."70

In OJC, restrictive ROE sought to minimize collateral damage and noncombatant casualties by restricting the use of artillery and airpower. Only a field-grade officer could authorize indirect fire from mortars or howitzers. When civilians were present, the use of artillery, mortars, armed helicopters, AC-130 tube- or rocket-launched weapons, or M551 main guns was prohibited without the permission of a ground commander with at least the rank of lieutenant colonel. Close air support, white phosphorus, and incendiary weapons were also prohibited in areas containing civilians without approval from at least division level.⁷¹ General Stiner himself controlled air strikes from fixed-wing aircraft.

Restrictive ROE also forced a change in infantry TTPs in Panama.⁷² For example, troops were not allowed to blindly clear rooms with a grenade. Strict ROE hampered small-unit tactics in numerous ways. The SEAL disaster at Paitilla Airport has been blamed on ROE that prevented SEAL snipers from shooting the PDF sentries before the SEALs began their main assault on the hangar.

Permissive ROE escalated tensions on the ground, caused higher noncombatant casualties, eroded the support of the population, and made it more difficult to gather HUMINT. Chechnya demonstrated

 $^{^{70}}$ See Travis M. Allen, Protecting Our Own: Fire Support in Urban Limited Warfare, Carlisle Barracks, PA: U.S. Army War College, 1999, p. 22.

⁷¹Taw, Operation Just Cause, p. 24.

⁷²It should be noted that in Panama, ROE varied according to the objective. One company of the 3/75 Rangers attacked the Torrios terminal under a "weapons tight" mode (cannot fire until fired upon), but they were "weapons free" when they assaulted La Comandancia.

how indiscriminate attack by artillery or airpower can be counterproductive. One of the most important objectives in the urban guerrilla conflict was the will of the indigenous population. Since the guerrillas relied on the indigenous population for concealment, supplies, and intelligence, peacemaking forces could only succeed if that support was cut off. Indiscriminate destruction strengthened the support of the population for the enemy.

The nature of support and stability operations (SSOs) demanded more flexible ROE. SSOs often involved complicated political goals that were subject to change as the operational environment shifted rapidly. For example, the fluid conditions in Somalia required that soldiers be given some ROE latitude. Somalia was a peacemaking environment characterized by civil war, poverty, and unemployment with large numbers of armed Somali males running around in "technicals." Deadly force could be used when soldiers were fired on or when the enemy had "hostile intent." ROE that allowed a "graduated response" to threats, like the ROE in Somalia, offered one type of flexible response.

Presence of the Media

Media presence was more significant during the past decade for several reasons. Both the number of reporters and the portability of their information technology increased. It was easier for reporters to

 $^{^{73}}$ Technicals were pickup trucks loaded with gunmen and/or crew-served weapons.

⁷⁴The ROE for both UNITAF and UNOSOM II were initially the same. USCENTCOM developed ROE based on its standard peacetime ROE. The commander of the Joint Task Force (CJTF) was then allowed make ROE more restrictive but not more permissive by issuing operating rules based on the ROE to his forces. These rules were copied onto 35,000 unclassified cards and handed out to U.S. soldiers. These ROE also formed the basis of ROE for UNOSOM II. Coalition forces were responsible for their own conduct. Because UN military forces were assigned their own sectors of responsibility, there were no conflicts that involved different sets of ROE. In fact, most other nations did not pay as much attention to ROE and in many cases used U.S. ROE. See Lorenz, "Law and Anarchy in Somalia," p. 29; and Jonathan T. Dworken, "Rules of Engagement: Lessons from Restore Hope, *Military Review*, September 1994, p. 28.

⁷⁵The lack of nonlethal weapons limited soldiers' ability to use a graduated response to provocation. Yelling and throwing rocks back at their tormentors was ineffective. Pepper spray later proved more useful, and the Somalis were eventually conditioned to back off when soldiers simply waved aerosol shaving cream cans. Colonel F. M. Lorenz, "Law and Anarchy in Somalia," *Parameters*, Winter 1993–1994, p. 34.

gain access to the fighting in peace enforcement missions.⁷⁶ Most belligerents found the media a useful information tool for PSYOP, IO in general, civil affairs, and public affairs. Recent operations reinforce the notion that a successful political-military strategy must take account of the media's influence.

The Mogadishu and Budyonnovsk⁷⁷ examples, in particular, demonstrated that shocking images of combat can sway public opinion in an open democratic society and create intense political pressure to cease hostilities, especially if the conflict does not involve vital national interests. The Somalis influenced American public opinion by providing the media with graphic images of a mutilated American corpse being dragged through the streets of Mogadishu. The broadcast of this brutal image turned out to be a pivotal event. The Chechen raid on Budyonnovsk was also a pivotal media event. Television images of screaming women and children turned the Russian rescue attempts to free hostages at the hospital into a public relations disaster that was transmitted around the world. The resulting public outcry generated enough political pressure for Yeltsin to order negotiations with the Chechens. Budyonnovsk led to the first cease-fire, which gave the Chechens time to regroup after the successful Russian operations of the spring of 1995.

The media's influence on information operations depended, of course, on the extent of its access to the battlefield. Access depended on the remoteness of the region and the nature of the mission. Humanitarian operations generally meant more media presence because of the standing agreement that the press have unlimited access. If the area of operations was remote and the mission was not humanitarian, media access could be controlled through the use of the press pool (which was effective in Grenada, Panama, and Operation Desert Storm).

In Panama, the media was effectively controlled during the first few crucial days of combat (no shocking images of war were released). The short notice and brief duration of the main fighting were the primary reasons for this, but the use of the pool system kept

⁷⁶The more remote a battlefield is (like the Iraqi desert), the easier it is for the military to restrict and control reporters.

 $^{^{77}}$ See the PSYOP section for a detailed description of the fight at Budyonnovsk.

reporters off the battlefield. Both in CONUS (continental United States) and Panama, preparations for Operation Just Cause were concealed well enough to maintain operational surprise.⁷⁸ The Pentagon took some time assembling a press pool for OJC, and even when sixteen reporters finally did arrive in Panama, they were kept waiting in a parking lot until half of them gave up and returned home. The Pentagon press pool arrived at Howard Air Force Base at dawn on D-day, but they were subjected to a lecture on Panamanian history and flown to Fort Amador where they witnessed a firepower demonstration. They were not given access to combat infantrymen or wounded.⁷⁹ The media center was poorly equipped, so the pool had difficulty in filing timely news reports.⁸⁰ Most reporters holed up at the Quarry Heights Officer's Club and tried to share information on the fighting.⁸¹ Although a few reporters did skirt DoD's restrictive press pool system and managed to roam the streets on their own, no reporters covered the most intense fighting in Panama City or Colon during the first two days.82

Media access in the Chechen War stands in sharp contrast to Panama. In general, the Russian military appeared to lack a cohesive strategy for controlling the media. As one Russian commentator put it, the Army had a "weak contact and interaction with the mass media."⁸³ Access to the Chechen War was so porous that one journalist

 $^{^{78}}$ For example, Cable News Network (CNN) had learned from past operations to watch Pope Air Force Base next to Fort Bragg for increased activity, a tip that the 82nd Airborne Division was getting ready to act.

⁷⁹See McConnell, *Just Cause: The Real Story of America's High-Tech Invasion of Panama*, p. 197. According to the Joint History Office, reporter requests to visit the troops were turned down due to a shortage of available helicopter transport. See also Ronald M. Cole, *Operation Just Cause: The Planning and Execution of Joint Operations in Panama, February 1988–January 1990*, Washington, D.C.: Office of the Chairman of the Joint Chiefs of Staff, 1995, p. 48.

⁸⁰See Pascale Combelles-Siegel, *The Troubled Path to the Pentagon's Rules on Media Access to the Battlefield: Grenada to Today,* Carlisle Barracks, PA: U.S. Army War College, 1996, p. 10.

⁸¹Some reporters were already present before the fighting erupted, but they were not given timely access to the dozens of battles raging across Panama. Donnelly, Roth, and Baker, *Operation Just Cause*, p. 411.

⁸²See McConnell, Just Cause: The Real Story of America's High-Tech Invasion of Panama, p. 2.

⁸³See Zakharchul, "View of a Problem."

called it the "great drive-in war."84 The author of Chechnya: Calamity in the Caucasus was able to drive directly from Moscow to Grozny and interview Dudayev twice.

The Chechen War was the first war in which the Russian and foreign press were allowed to witness Russian combat operations. It was also the first "TV war" for the Russian public. Hundreds of reporters arrived in Chechnya as the tanks rolled in. Not only did the usual Western press agencies cover the fighting, but ITAR-TASS (the semiofficial Russian news source), NTV (Russia's biggest independent television station), and a gaggle of other Russian media types were in Chechnya. Russian independent television stations regularly ran critical and embarrassing coverage.85

The official military press had a hard time keeping up with the civilian press because it was used to having privileged access. At times the Russian military did try to influence and control the media's message, but this effort was minimal.86 When official Russian reports were released to the public, they often contradicted what the civilian media was reporting on the scene. Official attempts to cover up casualties and downplay the carnage of the war often backfired when the truth was made available by the media. Because the Russian disinformation campaign failed to account for the civilian media, it damaged soldier morale. For example, during the August 1996 battle for Grozny, recorded radio messages between Russian soldiers fighting for their lives were released by a Russian news program:

You telephone Moscow. They are saying on the television it is an insignificant conflict. What that really means is that we are surrounded and our checkpoint is being destroyed.87

In contrast to the Russians, Chechen IO used the media. Dudayev gave nightly interviews to Radio Liberty. Dudayev's storyline made it

⁸⁴See Lieven, *Chechnya: Tombstone of Russian Power*, p. 119.

⁸⁵The media appeared to have a pro-Dudayev position on many of the news items during this period.

 $^{^{86}}$ One example was the instance of a Russian television crew filming ferocious-looking Russian commandos firing automatic weapons into the smoking ruins of the presidential palace after it was taken.

⁸⁷See Gall and de Waal, Chechnya: Calamity in the Caucasus, p. 338.

into the media while the Russian military's side did not.⁸⁸ The Chechens used mobile TV stations to override Russian TV transmissions and deliver messages from President Dudayev directly to the people. The Internet was used to raise funds from abroad and mobilize Russian pubic opinion against the war.⁸⁹

The overall impact of the media on the outcome of the Chechen War is difficult to assess. Media reports and images generated both international and domestic political pressure, but the latter was by far the more influential.⁹⁰ Media coverage waxed and waned during the course of the war.

PSYOP and Civil Affairs

PSYOP are actions to convey selected information to foreign audiences to influence their emotions, motives, objective reasoning, and, ultimately, their behavior. ⁹¹ Civil affairs support PSYOP because they establish, maintain, and improve relations between the military force and the civil authority and general population.

In all three of the case studies, PSYOP and civil affairs operations proved indispensable in influencing the will of the civilian populations involved. In Chechnya, PSYOP were used to increase the number of noncombatants, and they were conducted by combining media exposure with daring military raids into Russian cities. In Chechnya and Panama, PSYOP also proved effective against military forces with low morale and cohesion, respectively the Russian army and the PDF.

 $^{^{88}} See$ Thomas, "The Caucasus Conflict and Russian Security: The Russian Armed Forces Confront Chechnya, III. The Battle for Grozny, 1–26 January 1995," p. 89.

⁸⁹See Thomas, "Some Asymmetric Lessons of Urban Combat."

 $^{^{90}}$ The destruction in Grozny (especially by airpower) raised an international protest by members of the OSCE, the Council of Europe, and the EU, resulting in several demarches and sanctions. See Baev, "Russia's Airpower in the Chechen War," p. 6.

⁹¹Psychological operations can be waged at all levels of war. Strategic PSYOP aim to influence the will of the civilian populations involved in the conflict. Operational and tactical PSYOP aim to erode the fighting will of the enemy forces and to induce their surrender, desertion, and defection, to bolster friendly morale, and to win or coerce support from local populations. See Hosmer, "The Information Revolution and Psychological Effects," p. 218.

The circumstances, duration, and nature of the specific conflict partly determined the influence that civilians had upon combat operations (and therefore the importance of PSYOP and CA). In Panama, civilians were ambivalent about the fighting, and the basic civil affairs mission for Restore Hope was to minimize civilian interference with military operations. In the Somalia peace operation, the nongovernmental organizations (NGOs) were the civil affairs experts and few military specialists were used. The U.S. military also remained aloof and conducted minimal PSYOP. 92 In Chechnya, the insurgent nature of the conflict ensured that PSYSOPs were conducted extensively by both sides. The will of the Chechen people and the Russian people—as well as the public opinion of the world—was at stake for both sides.

Operation Just Cause demonstrated how effective PSYOP and CA units are when they are used against an army with weak morale and poor support from the indigenous population.⁹³ During the initial combat operations, PSYOP personnel deployed with the infantry, carrying bullhorns and going from building to building to ask or demand the surrender of PDF holdouts.⁹⁴ Usually the PDF soldiers did surrender; at other times they offered token resistance or simply ran away. A combination of ROE and PSYOP that used a graduated response usually proved sufficient. At Fort Amador, a demonstration of 105mm cannon, .50 caliber machine guns, and antitank and small arms fire combined with loudspeaker countdowns induced a stream of prisoners out the rear of the threatened buildings. The city of Colon could have been a nasty urban fight but most of the PDF surrendered or fled. In the town of Coco Solo, a demonstration by two

⁹²UNITAF had made some earlier efforts at PSYOP, including leaflet drops, deploying loudspeaker teams, running a radio station, and even producing a daily newspaper that contained verses of poetry from the Koran. Based on comments by Ambassador Robert Oakley at the RAND/TRADOC/MCWL/OSD Urban Operations Conference, Santa Monica, California, March 23, 2000.

 $^{^{93}}$ In Panama, American PSYOP and civil affairs personnel maneuvered with combat troops throughout combat operations. They also did so during the later support and stability operations in Restore Hope. Members of the 96th Civil Affairs Battalion and the 4th PSYOP Group were among the first U.S. forces to parachute into Panama.

 $^{^{94}}$ Civil affairs units were aided by the fact that many combat infantrymen spoke Spanish.

20mm Vulcan Gatling guns mounted on HMMWVs convinced the 8th Naval Infantry company to surrender at its PDF barracks. 95

Hundreds of civil affairs troops eventually deployed to Panama to execute Promote Liberty, a civil affairs operation designed to control the population and prevent looting. CA units restored basic functions throughout Panama City, established a police force, supervised the distribution of food, and even developed a grassroots organization to sell the new government to the Panamanian people. PSYOP teams focused on communication themes designed to quell further resistance—for example, that U.S. forces had only deployed to protect the lives and property of U.S. citizens, or that U.S. differences were with Noriega alone and not with the Panamanian people. Property of U.S. citizens, or that U.S. differences were with Noriega alone and not with the Panamanian people.

The Chechens used PSYOP to maintain political pressure on Yeltsin's government to stop the conflict. 98 Chechen PSYOP were effective because most Russian soldiers and civilians did not feel that vital national interests were at stake. The Chechens knew it would be very difficult to actually destroy Russian armed forces in battle; they sought to destroy their opponent's will to fight. The lack of political conviction and leadership on the Russian side created a vulnerability for Chechen PSYOP. Since political support for Yeltsin's decision to invade Chechnya was weak from the start, both the Chechens and the Yeltsin administration understood that the will of the Russian people was an important target. Moscow sought to bolster domestic

⁹⁵See McConnell, Just Cause: The Real Story of America's High-Tech Invasion of Panama, p. 152.

⁹⁶Cole, Operation Just Cause: The Planning and Execution of Joint Operations in Panama, p. 53.

⁹⁷Ibid., pp. 53–54.

⁹⁸Thomas writes that four types of PSYOP operations were employed in Grozny: intimidation, provocation, deception, and persuasion. PSYOP were employed to change attitudes through either fear or anger. Acts of intimidation ranged from the Chechen practice of stringing up Russian prisoners outside the windows of the Council of Ministers building so they could fire from behind them to Dudayev's threats to blow up nuclear reactors. An example of provocation was the Chechen practice of firing on Russian helicopters from village centers, in order to provoke return fire. Chechen villages and homes were invariably destroyed, further alienating the public. Chechens also used many deception techniques such as dressing up as Russian soldiers or Red Cross workers. Persuasion techniques included using loud-speakers and leaflets to talk the Chechens into surrendering their weapons.

support for the war by the use of disinformation about the types of weapons used against targets in civilian areas, friendly casualties, and noncombatant deaths.

The most effective PSYOP tools for the Chechens turned out to be the media and the use of dramatic surgical MOUT strikes into Russia. Two highly publicized Chechen raids into the Russian urban areas of Budyonnovsk and Pervomaiskove garnered intense publicity about the conflict among the Russian people and the rest of the world.⁹⁹

In the first raid, Chechen leader Shamil Basayev raided the Russian city of Budyonnovsk in June 1995 with 148 fighters, capturing a city hospital and taking several hundred hostages. In the ensuing drama, Basayev obtained a press conference (after executing 12 hostages) and paraded Russian women and children captives in front of television cameras. A botched rescue attempt by the Russians led to further civilian and military casualties, which subsequently led to negotiations between Basayev and Russian Prime Minister Chernomyrdin. The meeting was televised, which implicitly granted the Chechens official respect and recognition. 100 The Budyonnovsk raid helped to swing Russian popular opinion against the war, temporarily forced a cease-fire, and led to a round of peace talk negotiations.

The second raid occurred on January 1996, when Salman Raduvey led 250 men into the Russian province of Dagestan, attacked the city of Kizlyar, and seized about 3,000 hostages. After cutting a deal, the Chechen guerrillas loaded up several buses with hostages, and the whole group headed home to Chechnya. The column was stopped outside the village of Pervomaiskove near the border. The Chechens dismounted and entrenched in the village, and the Russians gathered reinforcements over the course of the next five days. Eventually Russian tanks, helicopters, and artillery pounded Pervomaiskove as infantry and the elite Alpha commandos fought their way forward into the village building by building. Chechen machine guns and RPGs were instrumental in beating back the undermanned Russian attack. After eight days of seesaw battle, the Russians decided to withdraw their infantry and pulverize the entire village with standoff

⁹⁹See "Russia's War in Chechnya: Urban Warfare Lessons Learned 1994–96," p. 4.

 $^{^{100}}$ See Major Raymond C. Finch III, "A Face of Future Battle: Chechen Fighter Shamil Basayev," Military Review, June-July 1997.

fire. When the Chechens heard of the impending barrage (by listening in on Russian communications), they decided it was prudent to leave. They dispersed in groups of fifty, exfiltrating through the Russian lines with their hostages in tow. Most managed to escape back across the Chechen border.

Throughout the Pervomaiskoye crisis, Russian authorities attempted to cover up the excessive civilian and military casualties, but their efforts backfired when the media covered the brutal assault on the village and reported the truth to the Russian public. ¹⁰¹ Bloody Russian civilians gave interviews about the disregard for innocent bystanders and savage lack of ROE. Dozens of Russians of all political persuasions publicly condemned the Yeltsin government, raising political pressure to finish the costly war.

The Chechens also used PSYOP to encourage civilians to migrate to the fighting. Captured Russian soldiers were shown on Russian TV, prompting the mothers of some to travel to Chechnya on their own and negotiate for their sons' lives. ¹⁰² As one Russian mother said,

Russian mothers are screaming at Yeltsin, telling him to stop, stop the war. He just doesn't care. He just stares like a ram at a new gate. 103

They encouraged hundreds of Russian mothers living in Russia to launch a grassroots campaign to stop the war and save their sons who were prisoners. When the Chechens were holed up in the presidential palace, they called the mother of one Russian captive, Krayeva, and told her that "your son is with us. He is alive, and everything will be fine but you must demand an end to the war." Mrs.

¹⁰¹According to Gall and de Waal, overall casualties were 96 Chechen fighters killed, 26 hostages killed, and about 200 Russian military killed and wounded. See Gall and de Waal, *Chechnya: Calamity in the Caucasus*, p. 303.

 $^{^{102}\}mathrm{Director}$ Sergei Bodrov's movie *Prisoner of the Mountains* (1997) was about two Russian soldiers held captive by the Chechens. The mother of one of the soldiers travels to Chechnya to beg for her son's life.

 $^{^{103}\}mathrm{See}$ Steve Erlanger, "A More Confident Russia Presses Hard on Rebels," The New York Times, January 15, 1995.

 $^{^{104}}$ For example, when 50-odd Russian paratroopers were captured near the village of Alkhazurovo, the Chechens telephoned their mothers to come pick them up.

Krayeva organized meetings, sent letters and telegrams to Yeltsin, and eventually went to Grozny to beg for her son's life in person.¹⁰⁵

The standard PSYOP methods the Russians used to target the Chechen population proved to be ineffective. Leaflets were dropped from Russian aircraft and loudspeakers attempted to convince the Chechen people to not support the guerrillas or fight. Chechen radio was jammed. Local television stations were destroyed. Part of the problem was lack of civil affairs units in the Russian army. 106

Political-Military Strategy

Recent operations demonstrated that a political-military strategy is necessary to coordinate all efforts—especially IO—to subdue the enemy will and sustain your own people's will. It was important to have clear objectives before using military force, to make sure benefits justify costs, to avoid mission creep, and to have a clear exit strategy. ¹⁰⁷

The Somali experience demonstrated the folly of ignoring this wisdom. It was not just the media images of dead Americans that prompted an eventual U.S. withdrawal—it was the combination of the images and the absence of clear national interests that caused the public outcry. ¹⁰⁸ Peace operations in Somalia took place in an environment riddled with poverty, ethnic-cultural hatred, and anarchy. The Somalis did not follow war conventions. Under these

¹⁰⁵She ended up running around the battlefield while under fire, her son dragged behind her on a litter. One report also indicates that a large group of Chechen women once appeared outside the presidential palace to plead for everyone to stop the bloodshed. Gall and de Waal, *Chechnya: Calamity in the Caucasus*, p. 214.

 $^{^{106}}$ See Thomas, "The Battle for Grozny: Deadly Classroom for Urban Combat," p. 91.

¹⁰⁷At least one author has argued that an exit strategy is not necessary if no Americans are being killed. See John Mueller, "Public Opinion and Foreign Policy: The People's Common Sense," in Eugene R. Wittkopf and James McCormick (eds.), *The Domestic Sources of American Foreign Policy: Insights and Evidence*, Lanham, MD: Rowman & Littlefield Publishers, Inc., 1999, p. 57.

¹⁰⁸Warren Strobel notes that the so-called CNN effect—which he defines as a loss of policy control on the part of policymakers because of the power of the media—seems to have an impact primarily when policy is weakly held, is already in the process of being changed, or is lacking public support. See Warren Strobel, "The CNN Effect," *American Journalism Review*, May 1996.

conditions, it may have been impossible to meet U.S. political goals (including a limit on casualties) given the military means available.

The political-military strategy in Operation Just Cause was well executed. As the operation began, President Bush immediately gave a moving speech to the American people to justify the invasion and rally public support. General Powell's ready access to both the President, the Secretary of Defense, and the State Department allowed him to provide detailed political-military guidance to his operational commanders. There was a high level of coordination between the decisionmakers in the White House Situation Room and the military commanders in the National Military Command Center. A Crisis Action Team worked with the support of Defense Intelligence Agency personnel in the Crisis Management Room to respond to political-military issues as they arose. Military officers in the CJCS-J-3 Conference Room met daily with the National Security Council and the State Department. 109

In the Chechen War it appears that no coherent political-military strategy was followed. Even for a stoic people like the Russians who historically have always accepted high casualties in war, the linkage between political and military goals must be clear if they live in an open society where information on the costs of war is available.

The original decisionmaking body was the Security Council of the Russian Federation, which subsequently put Grachev in charge. The Russian political objective was to unseat Dudayev and replace him with a figurehead more compliant with Russia's political leadership. Grachev took charge of the Chechen operation himself after firing the entire top leadership of the NCMD¹¹⁰ who initially commanded the botched operation. Since the Security Council and the Ministry of Defense ran the operation at the highest levels, it is unclear whether the Russian General Staff was in the loop and who

¹⁰⁹Cole, Operation Just Cause: The Planning and Execution of Joint Operations in Panama, pp. 45–46.

 $^{^{110} \}rm{The}$ NCMD (North Caucasus Military District) is the military district responsible for Chechnya. It borders four independent states: Ukraine, Kazakhstan, Georgia, and Azerbaijan.

influenced Yeltsin to decide on an invasion in the first place. 111 The fact that terror bombing of Grozny continued for two days after Yeltsin ordered it halted appears to confirm that Moscow's control over field commanders was weak.¹¹²

The lack of political leadership had a corrosive effect on the morale of the Russian army. Many soldiers had no idea why they were fighting.¹¹³ Russian soldiers were especially bitter with Yeltsin and Grachev. As one sergeant put it,

We are here to show that the man who runs Russia has real power. The empire is dead and nobody can face it. So we are here to show that Russia is still a great power. But every day we are here we show the opposite. I have never been in another war, so I don't know what morale was. But other soldiers fought to save Russia. We fight to save Yeltsin.114

Russia's political leaders did a poor job of communicating to the Russian public the national interests at stake in Chechnya. Because the political goals of the war were never clearly articulated and justified, discontent grew at home. The political leadership failed to mobilize public opinion in favor of the invasion, did not identify what the desired end state was, and had no exit strategy. The lack of a political-military strategy contributed to the Russian weakness that Chechens sought to exploit—an unwillingness to accept the costs of prolonged guerrilla warfare.

¹¹¹See Steve Erlanger, "The World: Behind the Chechnya Disaster; Leading Russia into the Quagmire," The New York Times, January 8, 1995.

 $^{^{112}}$ See Stephen J. Blank and Earl H. Tilford, Russia's Invasion of Chechnya: A Preliminary Assessment, Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 1994, p. 8.

 $^{^{113}\}mathrm{Many}$ writers have noted the increasing convergence between military and civilian social values in modern society. Professional armies are more integrated into civilian life, with less separation and a corresponding lack of elitism among military men and women. Physical standards are dropping, more women are assuming roles on the battlefield, and it is more difficult to isolate soldiers from the influences of mainstream culture. Under these shifting conditions, individual soldiers demand to know clearly why they must put their lives on the line.

¹¹⁴Sergeant Vladimir Kalunin, quoted in Michael Spector, "The World; Killed in Chechnya: An Army's Pride," The New York Times, May 21, 1995.

In contrast, the Chechen will to fight was based on historical and cultural factors more than political factors. ¹¹⁵ In fact, most Chechens were not supporting Dudayev at the start of the war. It was only after the Russians started bombing Chechen homes and killing civilians that the public rallied behind Dudayev.

IMPORTANT FACTORS THAT REMAIN FUNDAMENTALLY UNCHANGED

Many of the remaining elements of MOUT identified in *Modern Experience in City Combat* remained fundamentally unchanged in the 1990s (see Table 5). Defending a city like Grozny was still much easier when the attacker could not isolate it. MOUT was still characterized by nonlinear combat between infantry squads and platoons. Combined arms teams were still essential and their employment did not change. The effects of surprise and technology on urban operations were no more important in the last ten years than they were during World War II. Communication in urban operations was still hampered enough that situational awareness remained elusive. Situational awareness was improved, but soldiers continued to communicate and fight the same basic way their fathers did at Hue.

Airpower evolved, but it is unclear whether the change was efficacious in terms of combat outcomes. For example, the usefulness of airpower varied according to circumstance—aircraft and rotary craft were less than ideal against an infantry force armed with SAMs or RPGs and dispersed among noncombatants, while airpower was effective against identifiable strongpoints during clear weather.

The remainder of this study provides an explanation for this lack of fundamental change for the following elements: situational awareness and intelligence, airpower, technology, surprise, combined arms, and joint operations.

¹¹⁵Chechens are a distinct ethnic group (close kin to the Igush) with an elaborate system of customs. Their society and loyalties are based on the clan and village. They have fought the Russians since the reign of Catherine the Great in the late 18th century.

Situational Awareness and Intelligence

Recent urban operations demonstrated that complete situational awareness remained an elusive goal, just as it was in the past. 116 There were two reasons for this in our case studies: the unavailability of HUMINT and an inability to transmit sufficient information in the harsh electromagnetic conditions of the urban landscape.

HUMINT was more effective than SIGINT in urban terrain, especially when many noncombatants were present.¹¹⁷ Somalia was a classic example of this type of HUMINT-intensive environment. The commander of Task Force Ranger, Major General William Garrison, believed that the key to catching Aideed was timely intelligence provided by HUMINT. HUMINT came from interpreters, humanitarian agencies, NGOs, civil affairs, infantry, military police, and special operations forces units, and about 20 Somali agents for the CIA based in Mogadishu.¹¹⁸

Despite a technological advantage in C4ISR, conventional armies oftentimes did not enjoy superior situational awareness over more primitive armies because HUMINT was usually the most effective type of intelligence in a city filled with noncombatants.

With the support of the population and the intimate knowledge that comes from fighting in their own back yard, one can argue that clan leaders in Somalia knew as much about what was going on as the Rangers taking cover in their HMMWVs. Somali gunmen knew where U.S. servicemen were because they had the support of the

¹¹⁶In fact, complete situational awareness may never be possible. War is inherently chaotic. Clausewitz tried to describe the complexity and uncertainty of war as ' Friction is used to represent all the unforeseen and uncontrollable factors of battle. In other words, friction more or less corresponds to the factors that distinguish real war from war on paper. It includes the role of chance and how it slows movement, or sows confusion among various echelons of command, or makes something go wrong when it has worked a hundred times before. See Carl von Clausewitz, On War, Michael Howard and Peter Paret (ed. and trans.), New York: Knopf, 1993.

 $^{^{117}}$ Low-intensity urban warfare places renewed emphasis on human intelligence. See Milton, "Urban Operations: Future War," p. 43.

¹¹⁸Information obtained by bribing was of questionable reliability. The main intelligence failure turned out to be an underestimation of Aideed's firepower, particularly regarding the stockpiles of hundreds of RPGs and the threat they posed to helicopters. See Everson, Standing at the Gates of the City, p. 36.

indigenous population. Somali women and children walked right up to American positions during the firefight, pointing them out for hidden gunmen. Gunmen also concealed their locations by hiding in crowds of noncombatants.

In contrast, U.S. situational awareness was relatively poor. Pockets of Rangers and Delta Force commandos holed up in adjacent buildings were often unaware that friendly units were close by. Officers circling above in command helicopters had access to real-time video of the firefight, but the video did not properly communicate the raw terror and desperation of the situation on the ground.¹¹⁹

Conventional armies also relied primarily on wireless communication for their C4ISR, which suffered severe degradation in the urban environment. Signals were blocked and degraded by channel obstructions and the interference of radio traffic. Radio signals were absorbed and reflected by buildings, materials, and other electromagnetic traffic. ¹²⁰

Since the urban operations relied on infantry, man-portable radios were essential. Unfortunately, man-portable radios had severe power limitations and were often unreliable. In Somalia, the man-portable PRC-77 radios (with secure devices attached) inside convoy vehicles were incapable of establishing a link, so that some vehicles became separated from their convoys during the firefight. In Chechnya, a shortage of portable battery chargers hampered man-portable communications and forced the Russians to rely on radios in infantry fighting vehicles.

 $^{^{119} \}rm The~commanders~in~the~TOC~could~see~what~was~happening~from~their~real-time~videos~beaming~down~to~them~from~the~Navy~Orion~plane~circling~over~Mogadishu.$ See Kent DeLong and Steven Tuckey, <code>Mogadishu!</code> Heroism and Tragedy, Westport, CT: Praeger, 1994, p. 95.

 $^{^{120}}$ Russian observers in Chechnya noted that wireless radios in the VHF/UHF range were best. Transmitters should ideally be placed in basements and antennas placed on the roof or in windows facing the receiver, connected using coaxial cable. Ground and airborne relays were also used.

¹²¹See Captain Mark A. B. Hollis, "Platoon Under Fire," *Infantry, January*–February 1998

¹²²See Thomas, "Some Asymmetric Lessons of Urban Combat."

Grozny's urban terrain kept the Russians from establishing continuous command and control. Clear lines of sight were difficult to maintain. The tactics of urban warfare—small infantry teams using raids and ambushes to advance and maneuver along separated axes—often resulted in the isolation of a "main body" and a nonlinear deployment of troops. 123 The complex nature of three-dimensional urban terrain meant that radio links could change at any time. both when the unit remained stationary and when it moved. Command and control positions had to be chosen with care with respect to these electromagnetic and tactical considerations; despite the best planning, an element of uncertainty always underlay communications in the city.

To enhance their communication links, the Russians learned to amplify their signals by locating transmitters and receivers along routes where radio waves could "excite" buildings or reflect off them. 124 Some structures actually increased the strength of wireless transmission by acting as reradiators.

Sometimes a minimal communications profile in the urban environment could, in fact, bestow advantages. It was difficult for Russian EW assets to cut off Chechen communications because of the loose and unstructured command and control system the Chechens used. As one Chechen put it, "When there is shooting we just find each other."125 The Somalis also used a primitive but effective form of communication. The SNA communicated by using human runners, by beating on 55-gallon drums, and by flashing lights across the city (their Motorola radios were surely jammed by U.S. electronic warfare assets). For communications during the course of the October 3 firefight, the Somali leader in charge, Giumale, avoided using

 $^{^{123}}$ See Lt. General Miron Pavlishin, "Multifunctional Communication Systems," Armeyskiy Sbornik, translated in FBIS FTS19950502000749, May 1996.

 $^{^{124}}$ Evidently the Russians did this in Berlin and Koenigsberg during the Great Patriotic War. For example, a radio signal could be sent along a street to bounce off a stone building at an intersection in order to communicate with a receiver located on a perpendicular street. In this way, buildings acted as passive relays. See Colonel Vitaliy Kudashov and Major Yuriy Malashenko, "Communications in a City," Armeyskiy Sbornik, translated in FBIS FTS19970502000659, January 1, 1996.

¹²⁵See Spector, "Commuting Warriors in Chechnya."

cell phones and instead used written messages and human couriers to issue his commands.

In Panama, the conventional force did enjoy excellent situational awareness and intelligence, but this was due to very unique circumstances. The U.S. troops already stationed in Panama trained beforehand on the very terrain they were to fight over. ¹²⁶ Units reconnoitered the actual routes they were assigned for OJC. A couple of units ended up fighting where they used to play volleyball or golf. Familiar terrain eased the psychological stress of combat and reduced the uncertainty inherent in the planning of any military exercise. U.S. soldiers knew how long it took to fly a helicopter from one objective to another; they knew what the lighting was like around the neighborhoods they needed to secure. ¹²⁷ They knew which PDF units were likely to remain loyal. ¹²⁸

In general, locating people in urban terrain was, and will probably remain, a difficult task. U.S. space and air assets such as unmanned aerial vehicles (UAVs), satellites, high-altitude aircraft, and battle-management aircraft like JSTARS are limited in their ability to detect dismounted forces in urban terrain because of the technological limitations of sensors, the presence of noncombatants, the nature of low-intensity warfare, and other uncontrollable factors such as inclement weather. Noriega's success in eluding U.S. attempts to capture him was embarrassing. 129 U.S. intelligence faced similar

 $^{^{126}}$ Extensive training and planning occurred over the long buildup of tensions. Various exercises and rehearsals were planned and carried out by the Joint Special Operations Task Force (JSOTF). JTF Panama ran a series of exercises throughout the summer and fall of 1989, known as PURPLE STORMs and SANDFLEAS.

¹²⁷See Donnelly, Roth, and Baker, Operation Just Cause, p. 167.

 $^{^{128} \}rm During$ the earlier October 1989 coup attempt, intelligence was gathered on which Panamanian units were most mobile and loyal to Noriega, including the PDF 4th Infantry Company and the Battalion 2000.

 $^{^{129}\}mathrm{Despite}$ a round-the-clock "Noriega" watch by SOUTHCOM in the weeks prior to invasion, the human and signals intelligence assets devoted to fixing Noriega's position failed to keep up with the wily leader. Noriega moved every four hours, routinely split his convoys, and used other deception techniques to keep his whereabouts unknown. U.S. HUMINT was poor in Panama. Loyal sources had not been developed and databases of local individuals were not up to date. Taw, *Operation Just Cause*, p. 18.

problems hunting for Aideed in Mogadishu.¹³⁰ On one raid, the Americans accidentally seized a key UN ally and members of the UN development program.

The Russians had an equally difficult time tracking dismounted infantry in the urban environment.¹³¹ Chechen infantry continued to elude Russian forces throughout the war. 132 Every time a Russian task force of mechanized forces and paratroopers managed to encircle a Chechen village, most Chechens were able to exfiltrate through the surrounding Russian units.

Situational awareness was also made more difficult when both sides dressed alike or when noncombatants wore attire similar to that of soldiers. In Chechnya, both sides wore civilian clothes or old Russian pattern camouflage and other items of military dress. Russian units used nonstandard uniforms, especially elite outfits that affected a "Rambo" look. Some Russians were forced to buy civilian clothes because of supply problems. In Somalia, males over the age of twelve were armed. It was hard to tell if a Somali was a bandit or a hired security guard for a humanitarian relief organization (HRO). 133

 $^{^{130}}$ The capture of specific individuals was difficult because individual Somalis looked very similar to the untrained eye.

 $^{^{131}}$ The most dramatic exception was the assassination of President Dudayev by pinpoint missile attack in April 1995. Supposedly the missile homed in on Dudayev's satellite telephone. See Baev, "Russia's Airpower in the Chechen War," pp. 5, 13.

¹³²In general, Russian SIGINT was poor in Chechnya. Chechen situational awareness was enhanced because of the poor communications security practiced by the Russians. The rebels basically listened to Russian communications that were transmitted in the clear. The Chechens were even able to deceive Russian aircraft into attacking their own people on occasion. No mockups of Grozny were completed. Reconnaissance was poor, and Chechen strongpoints were not uncovered prior to the assault. Maps were obsolete. Russian officers relied on 1:50,000 and 1:100,000 scale maps because they lacked more appropriate 1:25,000 or 1:12,500 scale maps. See "Russia's War in Chechnya: Urban Warfare Lessons Learned 1994–96," p. 7. Routes of advance were not properly reconnoitered. Cuts in funding before the war meant that many satellites were turned off, and few aerial photography missions were conducted prior to the invasion. Russian HUMINT was also poor. Not a single Chechen fighter was captured prior to the assault in Grozny.

¹³³See Lorenz, "Law and Anarchy in Somalia," p. 28.

Airpower

Airpower proved to be a mixed blessing in recent urban operations because of the presence of noncombatants, ROE, and capable air defense threats. Urban terrain, poor weather, and an inability to precisely engage dispersed infantry with air-to-ground munitions also contributed to the mixed performance of airpower.

On the positive side, airpower was effective in joint operations around the perimeter of small villages and towns that could be isolated, against specific strongpoints that could be pinpointed, and in open areas in clear weather. Attack helicopters provided security and route reconnaissance, overwatch, and suppressive fire for ground forces. For example, in Mogadishu, close air support from AH-6 gunships, Cobras, and Blackhawks was very valuable. Attack helicopters also had a positive psychological effect for friendly troops. The mere presence of helicopters served as a deterrent, causing crowds and vehicles to disperse. As one Ranger reported, "Those helicopters saved us. The brass casings came down around us like rain."

On the negative side, in general, airpower was not discriminate enough in the presence of noncombatants. Indiscriminate killing of noncombatants had adverse consequences for PSYOP, CA, and PA. For example, on September 10, 1993, SNA militia intermingled freely with hundreds of other Somalis, including women and children, as they swarmed against some UN peacekeepers who were attempting to clear a roadblock. In the ensuing battle, Cobra gunships succeeded in dispersing the attackers but killed about 100 Somalis, including noncombatants. 136

Helicopters also appeared to be vulnerable in MOUT environments where dismounted infantry carrying man-portable SAM weapons

¹³⁴The AH-1's TOW missiles and AIM-1 laser-designated 20mm cannon (boresighted to the gun) reduced collateral damage enough that they were able to place fires within 50 meters of friendly forces. See Jones, *Attack Helicopter Operations in Urban Terrain*, p. 43, and U.S. Army Forces, Somalia, *10th Mountain Division After Action Report*, Executive Summary, p. 43.

¹³⁵See DeLong and Tuckey, Mogadishu! Heroism and Tragedy, p. 95.

 $^{^{136}}$ See David, "The United States in Somalia: The Limits of Power," p. 9.

could conceal themselves within crowds of noncombatants. 137 During the Mogadishu firefight, two helicopters were shot down and three were damaged and forced to retire. 138 The vulnerability of helicopters to ground RPG fire complicated the mission when Task Force Ranger was ordered to try to locate, secure, and defend the two helicopter crash sites for 15 hours. Extending the duration of the surgical strike no doubt added to the high number of casualties. Helicopters were also vulnerable to snipers.

Airpower was effective in Operation Just Cause because the opponent failed to mount a credible air defense capability. 139 In fact, so many aircraft were used in OJC, air traffic control turned out to be a big challenge. 140 The fire support provided by Spectre AC-130 gunships and Apaches suppressed strongholds like La Comandancia so that infantry, light armor, and mechanized infantry units tightened a noose around the PDF.¹⁴¹ AH-64A Apache helicopters armed with Hellfire missiles were also introduced for the first time in OJC. 142

Airpower enabled ground troops to conduct rapid maneuver when the terrain was sufficiently open and no serious air defense threat

 $^{^{137}}$ The vulnerability of rotary-wing aircraft is growing because of the proliferation of MANPADS and millimeter-wave (MMW) tracking radar-guidance systems for shortrange surface-to-air missiles (SAMs) and anti-aircraft artillery (AAA). Most currently deployed radar-warning receivers cannot detect MMW signals. According to the Army, MANPADS "are, and will continue to be, the most lethal threat" and are currently in the inventories of 115 armed forces, terrorists, and drug traffickers and are widely available on the international arms market. See Bryan Bender, "Threat to Helicopters Is Growing," Jane's Defence Weekly, February 10, 1999. Sometimes tactics can be adjusted to reduce helicopter vulnerability. One Russian technique was to use captured high-rise buildings as cover and "pop up" to engage targets such as snipers and other weapons located in upper-story floors. See Celestan, *Wounded Bear*.

 $^{^{138}}$ Overall, three U.S. Blackhawk helicopters were shot down by RPG fire in Somalia. A QRF Black Hawk was shot down on August 25, 1993.

¹³⁹Of the special operations aircraft in Panama (including the MH-47D, AH-6/MH-6, and UH-60A helicopters), 30 percent were damaged and three were shot down, including the AH-6 carrying American civilian Kurt Muse. See Taw, Operation Just Cause, p. 21.

 $^{^{140}\}mathrm{With}$ up to 250 helicopters and airplanes flying around at night under blackout conditions, the airspace above Panama City became packed and dangerous.

¹⁴¹The actual damage caused by the airpower was minimal, though. For example, the Rangers who finally seized *La Comandancia* reported that the bottom floor remained intact. See Donnelly, Roth, and Baker, Operation Just Cause, p. 159.

¹⁴²The Apache night-fighting capability was particularly useful.

materialized. At the operational level in Panama, helicopters were indispensable in maneuvering troops between the multiple operational targets. Airmobile and airborne methods of insertion were the preferred means of deployment given the lack of a real SAM or counter-air threat. However, the more urbanized terrain in Mogadishu was an example of where aircraft were useful for inserting ground troops but not for extracting them. Landing zones large enough for helicopters were rare, and ground convoys were necessary to extract troops.

Russian airpower filled many crucial roles in Chechnya but was not a decisive element. Even though Russian airpower did succeed in establishing control of the air by striking three key Chechen airfields outside Grozny and effectively destroying the Chechen air force, it could not provide effective CAS to friendly troops. Poor weather, the presence of noncombatants and ROE, and an inability to engage dismounted troops in urban terrain limited the effectiveness of airpower. For example, during the initial assault on Grozny, poor weather severely limited the employment of precision weapons. As Benjamin Lambeth put it,

the weather took a turn for the worse, confronting VVS [Russian air force] aircrews with blowing snow, severe icing, and heavy cloud buildup with a low ceiling and tops above 15,000 feet. This made

¹⁴³There were reports that the PDF possibly possessed SA-7 or SA-14 surface-to-air missiles (SAMs), but these weapons did not materialize on the battlefield. U.S. airpower basically operated with impunity. The only serious PDF air defense force to see battle was at Rio Hato, where three ZPU-4 antiaircraft guns and several VF-150 and V-300 armored cars guarded the airfield. The air defense weapons were potentially dangerous given their ability to fire from four 14.5mm barrels into the transport aircraft carrying the airborne assault force. Fortunately, some Apaches used their 30mm chain guns to take out two ZPUs and a Spectre used its 105mm howitzer to take out the third.

¹⁴⁴Russian aircraft included the SU-27 fighter-bombers and SU-25 attack aircraft. Mi-8 and Mi-24 helicopters were also used offensively throughout the operation. Strategic bombers included the MiG-31, Su-27, Su-25, Su-17, and Su-24 short-range bombers to strike Chechen targets such as bridges, oil facilities, ammunition dumps, and C2 facilities. Tu-22M3 long-range bombers were also used. See "Russia's War in Chechnya: Urban Warfare Lessons Learned 1994–96," p. 4.

¹⁴⁵Pilots sometimes used poor weather as an excuse. Many times, military pilots refused to fly into areas where Spetsnaz were fighting by claiming that the weather was too poor. See Oleg Blotskiy, "Chechnya: A War of Professionals," *Nezavisimaya Gazeta*, translated in FBIS FTS19960822000828, August 22, 1996.

both high- and low-angle manual bombing impossible and also precluded any resort to electro-optical or laser guided weapons. Instead, the VVS was forced to use Su-24 Fencers in day and night level bomb releases from medium altitude (15,000-20,000 feet) against radar offset points or in inertial bombing against geographic coordinates, through heavy cloud cover. The gross inaccuracy of these deliveries resulted in many Russian losses to friendly fire. 146

Russian ROE, when they were in effect, limited the combat employment of air-to-ground munitions. Russian pilots were ordered to avoid the destruction of residences and the killing of civilians.¹⁴⁷ ROE were eventually violated because of the limited supply of precision-guided weapons, poor weather, and a lack of training. This resulted in heavy civilian casualties.¹⁴⁸

A notable success for Russian airpower was the bombing of the most potent symbol of Chechen resistance, the presidential palace, during the first battle for Grozny. Six Su-25s dropped BetAB 3,000-pound concrete-piercing bombs on the palace on January 17, 1995. 149 Two of the bombs penetrated the structure from top to bottom, leaving most of the surviving Chechens in shock.¹⁵⁰ Eyewitness accounts imply that the Chechens decided to evacuate after the Russians demonstrated they could penetrate down to the basement with airdelivered weapons.¹⁵¹ When a specific strongpoint with a concentrated mass of Chechens could be identified, airpower proved effective.

Russian airpower also enjoyed more success during March-April 1995 when the weather improved, more ground observers were em-

¹⁴⁶See Benjamin S. Lambeth, Russia's Air Power at the Crossroads, Santa Monica, CA: RAND, MR-623-AF, 1996, p. 201.

 $^{^{147}}$ See Aleksandr Borisov, "Viewpoint: This Is Not Afghanistan, the Climate Here Is Different," $Armeyskiy\ Sbornik$, translated in FBIS FTS19970523001807, August 1, 1995.

 $^{^{148}}$ Artillery caused most of the damage in Grozny. One press account estimates that between 10,000 and 40,000 civilians were killed by August 1995. See "The Casualties of Chechnya," The New York Times, August 10, 1995.

¹⁴⁹See Baev, "Russia's Airpower in the Chechen War."

¹⁵⁰See Lambeth, Russia's Air Power at the Crossroads, p. 202.

 $^{^{151}\}mathrm{See}$ Alessandra Stanley, "Chechen Palace, Symbol to Rebels, Falls to Russians," The New York Times, January 20, 1995.

ployed for intelligence gathering, and combat operations shifted from Grozny to more open areas. Su-24s carrying laser-guided bombs like the KAB-1500 helped Russian ground troops to capture the Chechen strongholds of Argun, Gudermes, and Shali in March and April. Vedeno and Shatoi also fell to a combination of armor and airpower with very few Russian casualties. Since these smaller villages and towns could be encircled, defense proved impossible.

The Chechens fielded the most robust air defense threat in this study. 153 Russian helicopters were vulnerable to improvised Chechen tactical air defense weapons such as truck-mounted 23mm cannons and 12.7mm heavy machine guns (the Chechens put both machine guns and mortars on 4×4 civilian SUVs and trucks). At least one Russian helicopter was shot down by an RPG. Four helicopters were shot down from mid-December 1994 to the end of February 1995; by May 1996, a total of 14 were lost and 30 damaged. Several more were shot down later during the final battle for Grozny. As a result, the Russians used helicopters mainly for noncombat missions. 154 The official line from General Vitaliy Pavlov was that helicopters were not suited for urban combat. 155

Airpower turned out to be a poor PSYOP weapon. The Russians used air strikes to pressure local populations to stop supporting Chechen guerrillas and to make separate truces with the Russian-installed client government in Grozny. As one source notes, "Bombardments were both indiscriminate and discriminate: indiscriminate in that they were intended to kill and terrorize the civilian population, but

 $^{^{152}\}mathrm{The}$ Chechens showed their respect for Russian airpower by their aggressive attempts to hunt down Russian forward air controllers whenever they located them.

¹⁵³Chechen air defenses included the Strela-10 (SA-13) SAM and the Igla-1 (SA-16), four mobile SU-23/4 radar and optically tracked antiaircraft guns, six ZU-23 and DShK optically sighted machine guns, and possibly some U.S.-made Stinger SAMs. See Lambeth, *Russia's Air Power at the Crossroads*, p. 196; also see "Russian Military Assesses Errors of Chechnya Campaign," *International Defense Review*, Vol. 28, Issue 4, April 1, 1995. Lieven believes the Stinger rumor is pure speculation. He also believes that most Russian helicopters were shot down with heavy machine guns, not SAMs. See Lieven, *Chechnya: Tombstone of Russian Power*, p. 278.

¹⁵⁴According to the Commander of Russian Army Aviation, General Pavlov, normally 65 to 70 percent of helicopter resources are used for combat (assaults, convoy scout, CAS), but in Chechnya only 17 percent were used for combat missions.

 $^{^{155}\}mathrm{This}$ was problematic because Russian doctrine called for a top-down approach to capturing buildings, which required troops to be airmobiled onto rooftops.

discriminate in that they were sporadic and limited."156 In some cases whole villages were deliberately destroyed to punish a local separatist. Russian aircraft also intentionally made low supersonic passes over Grozny, laying down sonic booms to simulate bomb explosions and intimidate the Chechens. 157 Indiscriminate bombing losses eroded the support of the indigenous population and domestic support back home.

Since weather had a significant influence on the application of airpower, its influence on urban operations should be noted here. In the surgical and precision MOUT cases, weather was not a factor due to the short duration of the conflicts (though in Panama city, fog and darkness in the early morning of December 20th made it a little more difficult for air assault troops to reach their multiple objectives). In the prolonged high-intensity case of Chechnya, however, bad weather severely limited air operations during the initial assault on Grozny. 158 Because of the limited capabilities of the radar and nightvision equipment on Russian helicopters, 95 percent of the days in February 1995 were listed as "nonflying days." 159 The frequent appearance of rain and fog over the battlefield limited the use of airdelivered munitions.

Technology

Urban warfare technologies employed in the 1990s did not differ significantly from technologies available before 1982. Weapons remained essentially the same, especially when ROE prohibited the stronger side from fielding advanced tanks and artillery. Commercial-off-the-shelf (COTS) equipment, nonlethal weapons, and PGMs were either not used, not considered, or were not deci-

 $^{^{156}}$ Ouote from Anatol Lieven, "The World Turned Upside Down: Military Lessons of the Chechen War," Armed Forces International, August 1998, p. 43.

¹⁵⁷See Lambeth, Russia's Air Power at the Crossroads, p. 202.

 $^{^{158}}$ For a helpful explanation of why Russian leaders decided to initiate the invasion during the worst weather of the year, see Finch, Why the Russian Military Failed in Chechnya.

¹⁵⁹Helicopters were used only when visibility was 1,500 meters.

sive. 160 Small arms weapons continued to decide the course of MOUT for the most part—in fact, some of the most effective technologies continued to be the sniper, the flame-thrower, and the rocket-propelled grenade (RPG).

For example, well-concealed snipers could still pin down entire formations of soldiers because no effective anti-sniper weapon had appeared on the battlefield. Snipers were used extensively by the Chechens, including 30 female snipers from the Baltic.¹⁶¹ They operated from rooftops and from deep within upper-floor apartments, making them difficult to spot. Snipers created a disproportionate psychological stress among the enemy. As one man put it:

During the entire time I spent in central Grozny in January 1995, whenever I was in the open I imagined the sights of a sniper's rifle zeroing in on my head from some high building half a mile away. 162

Superior technology was oftentimes negated by ingenious countermeasures. For example, the SNA were barefoot yet managed to keep up with Americans in their HMMWVs and helicopters because of their use of swarm tactics and roadblocks. The Somali gunmen were on foot but were able to keep up because U.S. convoys were forced to fight from ambush to ambush. 163

Technological improvisation was often useful. The Russians improvised their equipment according to the circumstances. Fine wire mesh screens and cages—which stood out about 25 centimeters from hull armor—were added to vehicles to guard against Molotov cocktails and the shaped-charge jets of molten material from

¹⁶⁰Precision munitions were generally not used. Russian high-precision artillery such as the 1K113 Smelchak (fired from Tiulpan 240mm mortars) and Santimetr guided projectiles (fired from 152mm howitzers) with laser target-indication and range finding were never used during the campaign. Some authors speculate that Russian commanders did not want to "waste" these expensive munitions on Chechnya.

¹⁶¹See Kostyuchenko, "Grozny's Lessons."

¹⁶²See Lieven, "The World Turned Upside Down," p. 40.

 $^{^{163}}$ Gunmen ran along streets parallel to the convoy, keeping up because the two fiveton trucks and six HMMWVs were stopping and then darting across intersections one at a time. This gave the gunmen time to get to the next street and set up to fire at each vehicle as it came through.

RPGs.¹⁶⁴ Steel plates were installed along the sides and above the roof of engine and transmission compartments. Infantry were protected by hanging vertical blinds of canvas or blankets to block sniper fire around certain areas. 165 The Chechens used tarpaulins to cover vehicle view ports when they attacked them. None of these technologies are new.

Commercial-off-the-shelf (COTS) technology has yet to make a significant impact in urban operations. Both the Chechens and the Somalis possibly used cellular phones, but they were easily jammed or tracked during the significant firefights. 166

Nonlethal technologies would have been quite useful in all three cases but were generally not available. Americans used some pepper spray in Mogadishu and the Russians found tear gas and smoke (including formulations containing white phosphorus) to be useful.167

Surprise

The advantage of surprise was critical to the outcome of all three case studies, but it was neither more nor less decisive than in the past. At both of the critical turning points of the Chechen War—the initial disaster in Grozny in December 1994 and the Chechen counterattack in Grozny in March 1996—Russian commanders and soldiers alike were shocked by the strength of the Chechen resistance.¹⁶⁸ The

 $^{^{164}}$ Also, reshetka armor screens—which resembled a set of venetian blinds fabricated out of steel bars—were added to trap incoming RPG rounds. See Sergey Leonenko, "Capturing a City," *Armeyskiy Sbornik*, No. 3, translated in FBIS, March 1995.

¹⁶⁵See Oleg Namsarayev, "Sweeping Built-Up Areas," *Armeyskiy Sbornik*, translated in FBIS FTS19970423002215, May 4, 1995.

 $^{^{166}}$ Apparently Chechen bands may have also carried one hand-held Motorola radio per eight-man team. Comments by Arthur Speyer, RAND/TRADOC/MCWL/OSD Urban Operations Conference, Santa Monica, California, March 22, 2000.

 $^{^{167}}$ White phosphorus is not prohibited under international war conventions. The Russians discovered that a lengthy inhalation of WP (20-30 minutes) caused severe irritation of the mucous membranes of the eyes, pharynx, and larynx. Protective mask filters could not block WP. See Leonenko, "Capturing a City."

 $^{^{168}}$ In contrast, Russian ground forces did not attempt to achieve surprise. From the beginning, their strategy was to produce a show of force—a.k.a. 1968 Prague style—by

Americans achieved operational surprise in OJC, positioned as they already were in Panama. ¹⁶⁹ Task Force Ranger lost the element of surprise in Mogadishu because the Somalis knew the basic pattern that U.S. forces followed from previous raids. As one of Aideed's lieutenants would say, "The Americans already had done basically the same thing six times." ¹⁷⁰ Each time a raid was conducted, the Delta commandos flew in to seize a target building, the Rangers would ring the target for security and helicopters would loiter to provide fire as needed. ¹⁷¹

Combined Arms (Infantry with Armor and Artillery)

All three cases reinforce current doctrine that combined arms teams are essential if you need to minimize friendly casualties. Armor lacked infantry support in Grozny and infantry lacked armor support in Mogadishu. Neither force fared well. At the same time, the use of combined arms teams resulted in more collateral damage and noncombatant casualties. This is why ROE sometimes prohibited their use.

Clearly ROE that prohibited the use of combined arms teams increased the risk in urban combat. In the surgical and precision cases, combined arms teams were generally restricted by ROE. No artillery or U.S. tanks were involved in Mogadishu, while the heaviest weapon in Panama was the ground- or air-based 105mm howitzer. In the high-intensity case, Russian artillery provided most of the firepower that destroyed Grozny and completed the seizure of the city.¹⁷² Once

rolling a seemingly invincible armored force straight into the heart of Grozny to intimidate the Chechens into surrendering.

 $^{^{169}}$ American forces achieved tactical surprise at the early objectives. Later assaults, such as Paitilla and Rio Hato, were obviously compromised by the violence of ongoing fighting.

 $^{^{170}}$ Quoted from Col. Ali Aden in Atkinson, "The Raid That Went Wrong."

 $^{^{171}}$ The Americans did try to vary their tactics somewhat. Sometimes they went in by helicopter; sometimes they went in by truck. Sometimes they came out on aircraft; sometimes they came out on trucks. The basic template was the same, however. See Atkinson, "The Raid That Went Wrong."

¹⁷²As is typical in any war, Chechen artillery and mortars inflicted the greatest number of Russian casualties during the initial fight for Grozny. See Gregory J. Celestan, "Red Storm: The Russian Artillery in Chechnya," *Field Artillery*, January–February 1997.

ROE were relaxed and collateral damage was allowed, artillery was used to flatten any strongpoint that impeded progress. This politically damaging approach was actually Soviet standard practice in World War II. 173 Direct fire destroyed most of the Chechen strongpoints, typically from a range of 150-200 meters. 174

Joint Operations

Joint operations occurred in all three cases, usually involving air and ground forces. For the most part, joint operations did not make a significantly greater impact compared to urban operations before 1982.

Most Russian operations in Chechnya were joint in nature by default because units from the Ministry of Interior, the Ministry of Defense, and the Federal Counterintelligence Service fought side by side. During OJC planning, most of the U.S. armed services got to participate. The Navy was given an opportunity to use SEALs for missions other than covert reconnaissance, and the Marines were ordered to assault the PDF in the vicinity of Howard Air Force Base. In Somalia, Navy SEALs and C3I assets were under Army control.

Command, control, and communication problems continued to plague joint operations. Communication between air and ground forces was a problem in all three case studies. In Panama, apparently, there was a communications failure at Paitilla Airport—the SEALs were not able to call in fire support from the Spectre gunship circling above. 175 During the attack on *La Comandancia*, poor situational awareness and communication possibly caused a Spectre to fire on U.S. troops, wounding twenty-one men. 176 In Mogadishu, naval reconnaissance aircraft had no direct line of communication

 $^{^{173}\}mathrm{According}$ to one source, Russian artillery was responsible for destroying 80–90 percent of enemy targets in the "tactical zone" in World War II. See Celestan, Wounded Bear.

¹⁷⁴See Celestan, Wounded Bear.

¹⁷⁵See McConnell, Just Cause: The Real Story of America's High-Tech Invasion of Panama, p. 66.

 $^{^{176}}$ Two Rangers were also killed by friendly fire at Rio Hato. See Donnelly, Roth, and Baker, Operation Just Cause, p. 153.

with the convoys on the ground.¹⁷⁷ Army attempts to guide the wandering line of vehicles toward the helicopter crash sites failed because of the delay in relaying directions to the ground commander.

In Chechnya, coordination was weak between light ground forces and aviation units. Russian command and control was never unified in Chechnya—no joint headquarters existed in Moscow where operations could be coordinated by one commander. As a result, poor lines of communication between the various services caused many cases of fratricide. At one point, a Ministry of the Interior regiment fought a six-hour battle with an army regiment.¹⁷⁸ In addition, the troops of the Ministry of Internal Affairs (MVD) were not designed, equipped, or organized for large-scale combat operations. They normally never trained with regular army troops and they possessed no organic armor or artillery.¹⁷⁹ It was difficult to integrate these police units into joint operations with the army.¹⁸⁰ Miscommunication between Russian ground units and CAS assets also caused many cases of fratricide.

¹⁷⁷The Orion pilots were not allowed to communicate directly with the convoy. Their orders were to relay all communications to the Joint Operations Center (JOC) back at the beach. Also, no direct radio communications existed between the Delta Force ground commander and the Ranger ground commander.

¹⁷⁸See Celestan, Wounded Bear, p. 10.

¹⁷⁹See Celestan, Wounded Bear.

 $^{^{180}\}mathrm{See}$ lesson 7, "Russia's War in Chechnya: Urban Warfare Lessons Learned 1994–96," p. 3.