



Hamas in Combat

The Military Performance of the Palestinian Islamic Resistance Movement

Yoram Cohen and Jeffrey White

Policy Focus #97 | October 2009

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Front cover: A Hamas militant carries an antitank weapon through the narrow alleyways in the Jabalya refugee camp, northern Gaza Strip, October 2004. (AP Photo/Hatem Moussa)

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The Gaza Strip



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Executive Summary

HAMAS, THE ISLAMIC Resistance Movement, remains a central player in the battle over the future of the Palestinians and their relationship with Israel. While Hamas has waged a violent campaign aimed at Israel and at its own Palestinian rivals, primarily Fatah, it is currently restraining its military activity and that of other Palestinian groups in the Gaza Strip. This period of quiet, however, does not signal the end of Hamas's struggle: more violence can be expected in the future, at varying levels of intensity.

The movement's willingness and ability to use violence for political purposes is a critical component of the Israeli-Palestinian equation. Hamas uses its operations to enhance its appeal to the Palestinian populace by demonstrating "armed resistance to the occupation." Prior to Operation Cast Lead in December 2008, the movement made military preparations a high priority. Nonetheless, combat is the real test of any military force, and Hamas's performance in the operation can be used to assess the organization's political and military capabilities as well as its claim to lead the Palestinian resistance.

Cast Lead was Hamas's most serious challenge, certainly since the group seized power in Gaza in 2007 and probably since it emerged during the first intifada in 1988. Despite attempts to put a positive image on its performance during the operation, the actual course of the fighting reveals a different story: Hamas and its military wing, the Izz al-Din al-Qassam Brigades (IDQB, or Qassam Brigades), accomplished little militarily, and their only real success was the continuation of rocketfire into Israel—which declined after three weeks of combat. While Israel did not press its military advantage (this would have required more time and greater penetration of densely populated areas of Gaza), had it done so, the Israel Defense Forces (IDF) undoubtedly could have destroyed Hamas's military capabilities.

Israeli forces enjoyed impressive advantages in this war, not least in intelligence—collection, analysis, and support for air-targeting and ground-combat operations. Even after the fighting began, Israel continued to develop new intelligence that commanders could use

in real time to strike Hamas leaders, rocket operations, and ground forces. Cooperation between the IDF and the Israel Security Agency (ISA, or Shin Bet) was a key factor in the success of Cast Lead's intelligence component.

A Gamble that Failed

Hamas's military capabilities grew substantially after 2005 as a consequence of four major developments: Israel's August 2005 disengagement from Gaza, Hamas's 2006 electoral success, the June 2007 Hamas takeover of Gaza, and the June 2008 Israel-Hamas ceasefire agreement.

While Hamas and the IDF had clashed many times before, with some of the engagements taking place on a fairly large scale, Cast Lead provided a real test of how Hamas military capabilities had evolved since the IDF withdrew from Gaza and the movement seized power there.

At the time of the operation, Hamas had a well-developed military structure, with as many as 15,000 to 16,000 potential combatants. Its core was the IDQB, with some 2,000 real combat troops. The Hamas forces consisted of an artillery-based offensive arm and ground forces serving as defensive formations. The latter were organized and equipped to defend both Gazan territory and Hamas leaders and to serve as a shield for the movement's rocket forces.

The IDQB had received considerable training and assistance, both inside and outside of Gaza. Within the Strip, the Qassam Brigades had a structured training program, and Hamas personnel from Lebanon, Syria, and Iran came to provide instruction or other assistance. The advice and guidance provided to Hamas by Hizbullah, Syria, and Iran was also important, as Hamas fighters had little real experience in combat against the IDF.

IDQB preparations focused on two major areas: increasing the ability of its ground forces to defend against IDF incursions into Gaza, and improving the organization's ability to strike targets inside Israel by expanding its artillery arm.

Having planned carefully for a major Israeli invasion, Hamas expected to mount an impressive defense using civilians and civilian facilities as cover for its military activity. In addition, Hamas hoped to achieve an “image of victory” by carrying out acts with more than military significance, such as kidnapping IDF soldiers, destroying tanks, or downing airplanes and helicopters. Defense of Gaza, however, was not Hamas’s only goal; it also intended to bring the war into Israel. At the heart of its offensive planning were the rocket artillery forces, intended for sustained strikes on Israeli civilian and military targets.

The Hamas effort to strike targets in Israel relied on a large, complex system. Qassam Brigades headquarters controlled the rocket system, and decisions to fire on targets in Israel were made at high levels; operational orders came down from the IDQB leadership to combat brigade and battalion firing units. In the period preceding the conflict, senior Hamas leaders in Gaza and Damascus made the key decisions. But once the fighting began on December 27, 2008, the Gaza leaders went into hiding and were able to exercise only limited influence on the military situation. The Damascus leaders had even less control over the fighting.

Hamas gambled with its decisions not to renew the June 2008 ceasefire with Israel and to escalate attacks on southern Israel, ultimately involving it in a war whose intensity exceeded the organization’s experience, expectations, and capabilities. Hamas artillery forces, primarily rocket units, carried out the offensive portion of military operations. All told, Hamas fired around 600 rockets into southern Israel, including some 400 Qassams produced in Gaza and approximately 200 of the longer-range Iranian rockets that had been smuggled into the Strip. Rocketfire was generally inaccurate; most rockets fell without causing harm, although some caused casualties, physical damage, or significant psychological harm. The Hamas rocket system was able to adapt, to some extent, to IDF efforts to suppress firing, and it succeeded in the important goal of sustaining attacks throughout the operation, even if at diminished rates.

The reduction in rocketfire that did occur was the result of several factors: the tempo of IDF activity and

the heavy fire from IDF units; damage to the rocket production and movement system, especially on the first day of the conflict; realtime targeting of rocket movements and launch sites and units; launch unit attrition and the resulting deterrence of launch activities; the movement of IDF ground forces into launch areas in northern Gaza; and the refusal of some Gazans to allow Hamas to fire in close proximity to their homes. Together, these factors constituted a concerted attack on the Hamas rocket system as a whole, and Israeli intelligence services—the Directorate of Military Intelligence and the ISA—played a key role in many of these factors.

Cast Lead saw no major ground engagements or battles between IDF ground forces and the IDQB. Hamas largely avoided major close combat actions, focusing instead on small tactical attacks that took minutes, not hours, sometimes utilizing civilian cover. Engagements were fought primarily at company level and below, with some fighting taking place in built-up areas. Hamas had planned to stand and fight, but the Qassam Brigades proved unequal to the task. None of IDQB’s ground combat measures worked, and consequently they failed to match the public image Hamas had tried so hard to present of stalwart, proficient Islamic warriors.

An Asymmetric Match

The Gaza conflict was asymmetric, similar in some ways to Israel’s 2006 war with Hizballah. The IDF, however, performed much better in Cast Lead than it had in Lebanon, and, conversely, Hamas much worse than had Hizballah. The Islamic Resistance Movement was simply outmatched, despite its preconflict preparations.

Hamas was tested by Operation Cast Lead and found wanting militarily. Indeed, the war, which posed many challenges, exposed a fundamentally flawed “theory of combat”—or expectations about the nature of war against Israel—and raised questions about the organization’s combat capabilities. The movement undoubtedly has its own reasonably accurate conflict performance balance sheet. Offensively, Hamas will likely follow in Hizballah’s footsteps by acquiring longer-range rockets with greater

accuracy and more powerful warheads. Defensively, Hamas had no answer to IDF air and ground capabilities. Since its planned defense of Gaza essentially failed, changes in equipment and doctrine are likely. The movement has recognized the problematic performance of its commanders and combatants, already replacing some brigade and battalion commanders.

A ceasefire between asymmetric opponents can

hold for some time, even if without a fundamental change in attitudes, policies, or intentions. Three years of relative quiet in southern Lebanon has illustrated this reality. Fighting releases tension, and those tensions usually take some time to build up again. More importantly for Hamas, being pounded in battle, with little to show for the effort, has a way of instilling caution with regard to future military engagement.

1 | Introduction

HAMAS, THE ISLAMIC Resistance Movement, is a central player in the battle over the future of the Palestinians and their relations with Israel. While it has waged a violent campaign aimed at Israel and at its own Palestinian rivals, primarily Fatah, it is currently restraining its military activity and that of other Palestinian groups in the Gaza Strip. This does not signal the end of Hamas's struggle, however, and more violence can be expected in the future, at various levels of intensity.

The movement's willingness and ability to use violence for political purposes is a critical component of the Israeli-Palestinian equation. Since early in its history, Hamas has sought military power and constantly attempted to expand it, because it views the acquisition and exercise of such power as a core element in the struggle for political primacy among the Palestinians, and in its fight with Israel.

Hamas uses its operations to enhance its appeal to the Palestinian population by demonstrating "armed resistance to the occupation." Prior to the start of Operation Cast Lead in December 2008, the movement made military preparations a high priority, yet combat is the real test of any military force, throwing its strengths and weaknesses into sharp relief. Hamas's performance against the Israel Defense Forces (IDF) in the operation can be seen as a measure of its political and military capabilities and its claim to lead the resistance, and it is worth examining both its preparations for war and its functioning in the three weeks of fighting. Figure 1 shows a timeline of the Gaza conflict.

Cast Lead was the most serious challenge for Hamas, certainly since it seized power in Gaza in 2007, and probably since it emerged during the first intifada in 1988. Despite its attempts to put a positive spin on

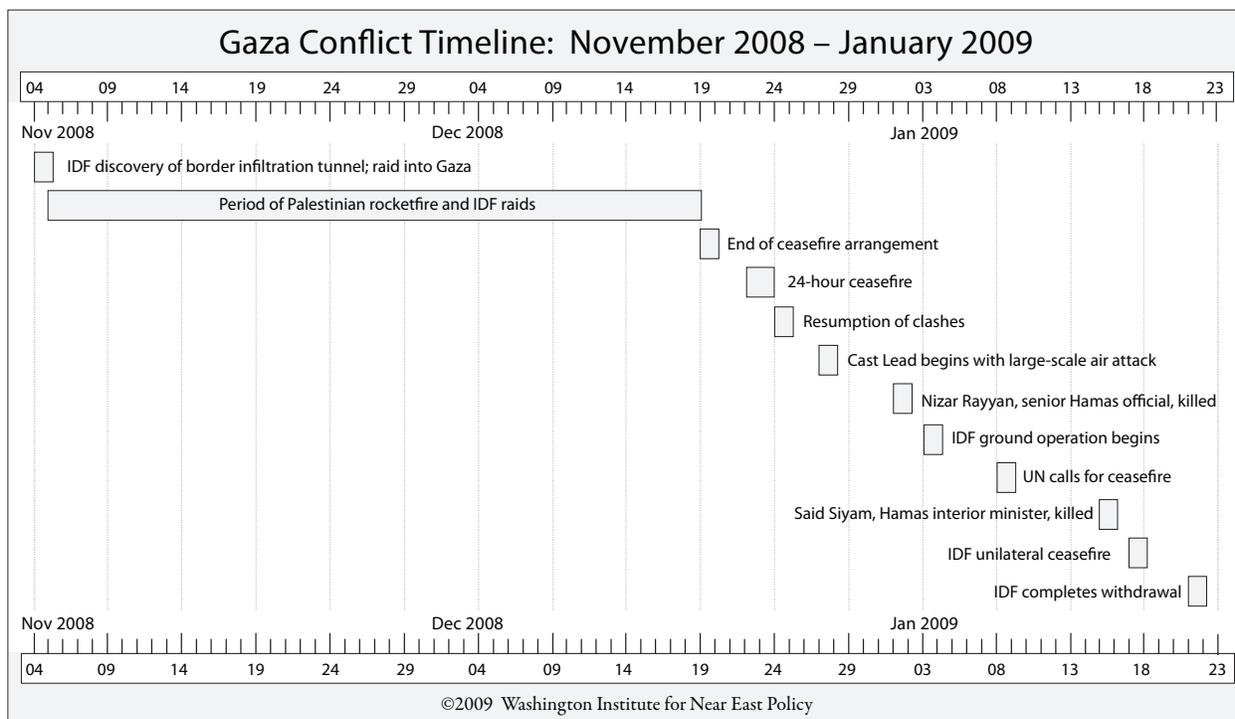


Figure 1. Gaza conflict timeline

the operation, the actual course of the fighting reveals a different story. Hamas and its military wing, the Izz al-Din al-Qassam Brigades (IDQB), accomplished little militarily. Most of their operations were futile, and their only real success was their ability to continue firing rockets into Israel, which in any case declined after three weeks of combat. Although Israel did not press its military advantage, there is little doubt that had the government decided to do so, it could have destroyed the movement's military capabilities. This, however, would have required more time and greater penetration of densely populated areas of the Strip, with more serious implications for Israel.

Hamas's military performance must also be placed in a broader context: the combat qualities of Islamic militants and the efficacy of "armed struggle." In the past, much attention was focused on Hizballah and Taliban military prowess, but the IDQB's performance in Gaza provides a different perspective, demonstrating that the "Islamic way of war" is more varied and complex than experience in Lebanon and Afghanistan suggests. These combat qualities depend on many factors; not all Islamic warriors are larger than life, and in fact, the Qassam Brigades in Cast Lead showed themselves to be quite the opposite.

The conflict between the IDF and the IDQB and its allies was asymmetric warfare, fighting in which the combatants have substantially different military capabilities and the weaker side uses nonconventional

tactics, such as terrorism. While in Cast Lead the IDF used a full range of conventional military capabilities—air, ground, naval, and informational—Hamas employed the weapons and tactics it had acquired expressly to deal with the IDF, many of which were gained through contacts with Hizballah and Iran.

The IDF enjoyed impressive advantages in this war, not least of all in intelligence—from collection, to analysis, to support for air targeting and ground combat operations. The intelligence included an extensive and well-developed set of targets for initial strikes, good knowledge of the Hamas rocket production and launch system, and a thorough understanding of IDQB capabilities and preparations for combat. This knowledge, developed from a combination of imagery intelligence, signals intelligence, and human intelligence, enabled the IDF to launch in-depth, precision attacks on Hamas from the outset of the operation. Of equal importance was Israel's ability to develop new information after fighting began, and convert that to intelligence commanders could use in real time to strike Hamas leaders, rocket operations, and ground forces. Cooperation between the IDF and the Israel Security Agency (ISA, or Shin Bet) was also key to the intelligence success.

Both sides had learned lessons from Israel's 2006 conflict with Hizballah, and both were committed to a serious fight in Gaza, if necessary. Cast Lead provided a good test of how well they had learned the lessons.

2 | Hamas Decisionmaking

IN THE PERIOD preceding the conflict, senior Hamas leaders in Gaza and Damascus made the key decisions. Once fighting began, on December 27, 2008, the Gaza leaders went into hiding and were able to exercise only limited influence on the military situation. The Damascus leaders had even less control of the fighting.

Divided Leadership

Hamas has components in Damascus, Gaza, the West Bank, and Israeli jails, each with its own leadership. The West Bank and prison components are the least powerful, as actions by Israel—and to some extent, other countries—to restrict Hamas movements, financial activities, arms purchases, and other activities have limited its ability to exercise power outside of the Strip. Within Gaza, however, Hamas wields power with little opposition.

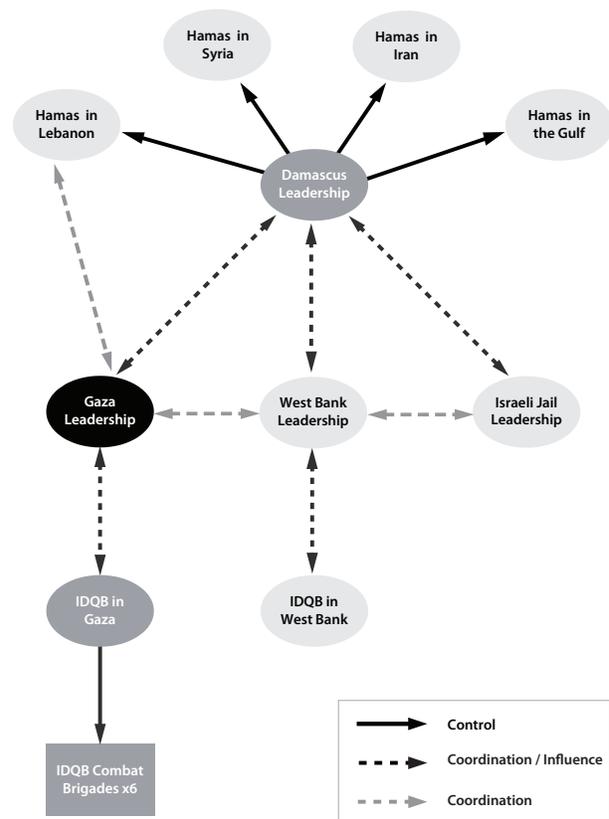
The movement's leadership is effectively divided between Khaled Mashal in Damascus and Ismail Haniyeh in Gaza. Hamas's June 2007 takeover of the Strip has somewhat changed the balance of power within the movement, elevating the leadership in Gaza to a more important position. It is unclear where, exactly, the balance lies between the two centers of power, but on issues concerning the world outside Gaza, Damascus is more important, while on issues affecting Gaza directly, the local leadership is more influential.

The Damascus-Gaza relationship involves mutual consultation and influence; the two centers work together, sharing responsibility. Nevertheless, there is also an element of tension, with competition among the leaders and disagreement on some important issues. Figure 2 depicts Hamas's decisionmaking structure.

The Damascus leadership is the face Hamas presents to much of the outside world, the primary voice of the organization, and a conduit for funding. It plays a critical role in coordinating the movement's external military affairs, including the training of Hamas personnel in Lebanon and Iran, purchasing and smuggling weapons, and dispatching Hamas military experts back

to Gaza from abroad. It also conducts the movement's foreign relationships. While these are important functions, Hamas in Damascus does not control territory or forces, and it is somewhat disconnected from the situation in Gaza.

The world as viewed from Gaza City looks very different from the world as seen from Damascus. In Gaza, Hamas must deal with the practical realities of governing, providing for the needs of over one million people. In addition, Gaza has become the effective center of resistance since Hamas took it over in 2007, and dealing with Israel and the IDF is a very real and immediate challenge and threat.



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Figure 2. Hamas decisionmaking

Within Gaza, decisions are made by a kind of collective leadership that functions like a cabinet, drawn from the organization's political, religious, and military sectors, with the political sector the most important. IDQB leaders are full participants in this process, not simply a subordinate element. While the Gaza leadership has its own divisions and tensions, the process of decisionmaking by consensus has generally proven effective.

The division of leadership between Damascus and Gaza imposes some limitations on the organization, reducing its ability to coordinate fully. Since Damascus leaders receive more limited and later information on events in the Strip, they lack a good understanding of the situation, especially when events develop rapidly. For this reason, the importance of the Damascus leadership was reduced still further during Cast Lead.

3 | Hamas Preparations for Combat

HAMAS'S MILITARY CAPABILITIES grew substantially after 2005 as a consequence of four major developments: Israel's August 2005 disengagement from Gaza, Hamas's 2006 electoral success, the June 2007 Hamas takeover of Gaza, and the June 2008 Israel-Hamas ceasefire agreement.

Israel's withdrawal from the Strip removed the constant threat of Israeli security forces; the movement used the following period to expand its forces to prevail over Fatah and emerge as Gaza's only serious military and political power.

With Israel gone and Fatah defeated, Hamas gained control of Gaza's quasi-state resources, including military and intelligence resources and infrastructure previously under Palestinian Authority (PA) control. This dominance removed any serious internal obstacles to Hamas military expansion. The June 2008 ceasefire created even better conditions for the movement's military ambitions by freeing it from the threat of Israeli raids and incursions. Egypt's failure to secure its side of the border also facilitated Hamas's smuggling of weapons and other items.

While Hamas and the IDF had had many prior clashes, some of them fairly large scale, Cast Lead provided a real test of how the movement's military capabilities had developed since the IDF withdrew from Gaza and Hamas seized power. Ultimately, its military preparations did not prove very effective in the face of this major IDF offensive.

Qassam Brigades' preparations were concentrated in two major areas: improving the ability to strike targets inside Israel by expanding the organization's artillery arm (rockets and mortars), and increasing the abilities of IDQB ground forces to defend against IDF incursions into the Strip. These preparations were heavily influenced by Hizballah's conflict with Israel, especially the 2006 Lebanon War, when Hizballah launched sustained rocket attacks deep inside Israel while conducting a determined defense of southern Lebanon, inflicting losses on an ill-prepared IDF and burnishing the organization's image.

Hamas military leaders, having fought their Fatah brethren in 2007, felt a need to fight Israel as well, both to demonstrate active resistance and to compete with Fatah. Their plan was not to advance on the ground into Israel, but to defend their territory while launching rockets against Israeli targets. They believed the Qassam Brigades would put up a good fight, inflict heavy casualties, and withdraw into urban areas, teaching the IDF a lesson it would not soon forget. This would be a major victory for Hamas, with long-term consequences both for Israel and the contest for Palestinian political supremacy.

Assumptions about Conflict with Israel

In the period prior to Cast Lead, Hamas political and military leaders appear to have made a number of critical assumptions concerning conflict with Israel that shaped their policies and preparations, yet ultimately proved to be flawed or invalid.

1. Israel will not go to war now: For a number of reasons, Hamas did not expect Israel to launch a major ground operation in late December 2008. These included the belief that the Qassam Brigades would be able to inflict serious casualties on the IDF; Israel's bad experience in the 2006 Lebanon War; the winter weather, which was thought to limit Israel's intelligence collection and aerial strike capability; Israeli public opinion, especially sensitivity to Israeli civilian and military casualties; anticipated pressure from the international community about civilian casualties within Gaza; and the approaching Israeli elections. By preventing Hamas from seeing the imminent danger of an Israeli attack, these beliefs contributed to Israel's successful deception activities immediately prior to Cast Lead.

2. Israel will conduct air strikes only: Hamas anticipated that if Israel did attack it would limit itself to air strikes because of the large number of IDF casualties that might result from a ground operation, the

risk that IDF personnel would be kidnapped, and the international criticism that would result from civilian casualties in a ground operation.

3. Any operation will be short: Hamas assumed that any operation would last only a few days, not weeks, due to the impending elections in Israel, the arrival of a new administration in the United States, and the international pressures that would be brought to bear on Israel.

4. The Israeli population will pressure the government to end the conflict: Hamas believed that Israel had no solution to rocket attacks on civilian targets, and it underestimated the resilience of Israel's home front.

5. Israel will not receive international support and will be largely isolated diplomatically: The disparity between damage inflicted by Hamas rockets and Israel's retaliation would undermine the legitimacy of any major Israeli action.

6. Israel will face multiple fronts: Hamas anticipated that it would not fight Israel alone, believing that once the fighting began, West Bank Palestinians would riot in protest against an Israeli operation. It also expected supporting attacks from southern Lebanon—either by Hizballah or by other Palestinian organizations—and riots and protests by Israeli Arabs. It planned to foment these reactions actively, and actually attempted to do so, with Khaled Mashal calling for a “third intifada” early in the conflict.¹

7. Israel must consider the fate of Gilad Shalit: Hamas believed that Israel would be influenced by concern that Shalit would be killed or injured during fighting in Gaza.

These assumptions, combined with Israel's history of hesitation and of limited military response to attacks from Gaza, caused Hamas to conclude that Israel would not launch a serious attack and that its response would not be a threat to the organization's existence in Gaza. This self-deception allowed Hamas to taunt Israel before the start of Cast Lead² and to fail to respond appropriately once the action began. Instead of grasping the seriousness of the situation, Hamas increased rocketfire on Israel, making an Israeli decision to launch a ground assault virtually certain. In almost all respects, Hamas's assumptions were wrong. This was a major failure by its leadership.

Hamas Military Forces

At the start of Cast Lead, Hamas had a well-developed military structure whose core was the Qassam Brigades, its effective combat force. The movement operated and controlled other armed organizations as well, including the executive and police forces. While both forces dealt with internal security, and the police performed routine police duties, they also cooperated with or supported the Qassam Brigades, and some of their men served in its units. Figure 3 shows the structure of the Hamas military and security apparatus.

Hamas combat forces were made up of two principal elements. The artillery forces (rockets and mortars) were the movement's offensive arm. The ground forces—combat brigades and supporting elements—were essentially defensive formations organized and equipped to defend the territory of Gaza, and particularly Hamas leaders, and they served as a shield behind which rocket forces could operate.

The Hamas Artillery System

Hamas's efforts to strike targets in Israel relied on a large, complex system ultimately extending to Iran.

1. “Hamas Calls for Third Intifada,” *Al Jazeera*, December 28, 2008, <http://english.aljazeera.net/news/middleeast/2008/12/20081227232637589589.html>.
2. For example, the Qassam Brigades spokesman stated on December 16, 2008, as the crisis was building, that “Zionists military commander or political cannot afford results of a decision as big as the invasion of the Gaza Strip, especially [as] the feel of defeat, failure and disappointment are still fresh to them after the war in Lebanon.” [Editor's note: Quoted as published without correction.] Ezzedeen al-Qassam Brigades Information Office, “Abu Ubaida: We Are Not Trotting to Calm,” December 16, 2008, http://www.qassam.ps/news-903-Abu_Ubaida_We_are_not_trotting_to_calm.html. See also Khaled Abu Toameh, “Hamas Mocks Israel's Nonresponse to Rocket Attacks,” *Jerusalem Post*, December 25, 2008.

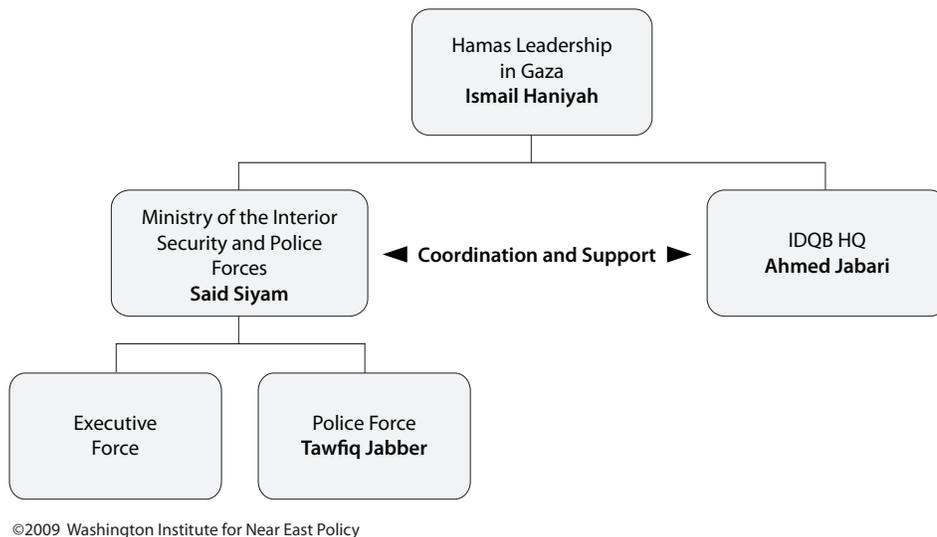


Figure 3. Hamas military and security apparatus

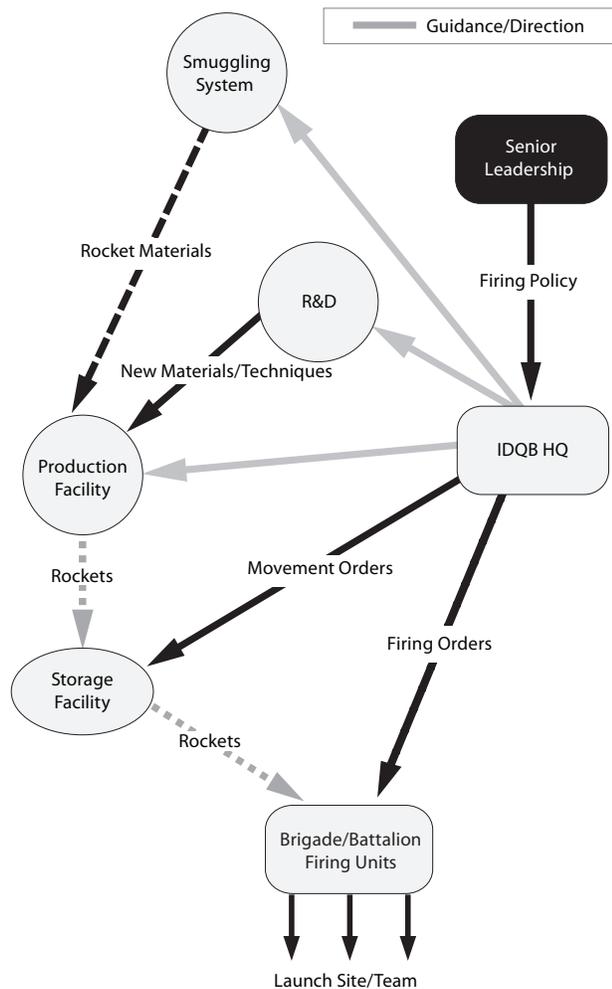
Explosives and rocket components were smuggled into Gaza primarily through the extensive tunnel system leading from Egypt into the Strip, where they entered an elaborate production and storage network within Gaza. Rockets were moved from dispersed production facilities to storage facilities or to firing units attached to IDQB battalions and brigades (figure 4). Hamas also had a rocket research and development center at the Islamic University in Gaza City that provided design and manufacturing support to the production facilities. The Israeli Air Force (IAF) struck the center during Cast Lead. The rocket system was under the control of IDQB headquarters, which received general policy direction from the senior Hamas leadership in Gaza.

The Hamas artillery program had four major components. The first was to produce Qassam rockets in Gaza that varied in range from six to twenty kilometers. This was the main type of rocket Hamas employed. The second component was improving rocket quality: larger warheads with better-quality explosives, improved motors for longer ranges, and a longer shelf life. The third was importing Iranian-

made Grad or Katyusha rockets with a range of twenty to forty kilometers by smuggling the components into Gaza and assembling them there. The fourth component was mortars of 81 and 120 millimeters—also of Iranian origin—that were used primarily for striking IDF forces, but could also be fired at civilian targets close to the border.

As rockets were a strategic weapon, the control of rocket units was important. Decisions to fire on targets within Israel were taken at high levels (by the military “cabinet”); operational orders came down from the IDQB leadership to combat brigade and battalion firing units, to which rocket firing and mortar units were attached. It is believed that rocket units had sets of preplanned targets on which to fire when ordered, but could receive additional targets during combat. The role of brigade and battalion commanders in the firing process is unclear.

As part of Hamas’s preparations, it identified and prepared launch sites, including underground and remote sites. It also had mobile rocket launch teams that could be moved from place to place as needed to attack targets or respond to Israeli countermeasures. At



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FIGURE 4. Hamas rocket system

the beginning of the conflict, launch areas were concentrated in the northern sector of the Strip. Importantly, rockets were distributed to brigades prior to the onset of fighting in anticipation of difficulties resupplying them while under attack. Before the war began, the organization was estimated to have about 1,500 rockets of all types.

Ground Forces

Hamas had as many as 15,000 to 16,000 combatants potentially available if all the military, paramilitary, and police forces under its control are counted. The Qassam Brigades had some 2,000 real combat forces, organized into six brigades, each of which had several battalion-level organizations with subordinate company/platoon-level elements. Each brigade had the following types of combat forces: artillery (rocket and mortar), antitank (missiles, RPGs [rocket-propelled grenades], mines), anti-aircraft (heavy machine guns), snipers, engineers, and infantry. The array of weaponry at Hamas’s disposal can be seen in table 1.

The Qassam Brigades also had various staff elements for specialized functions, including communications, intelligence, weapons production, smuggling, logistics, and public affairs. Anticipating that the IDF would attempt to divide the Strip into separate areas, Hamas provided its brigades with ammunition and other supplies prior to the start of combat to allow them to fight independently. Figure 5 shows the structure of the IDQB’s organization.

Three of the six brigades were in the northern part of the Strip, reflecting the importance of Gaza City; with its concentration of leadership, government facilities, and population, it was the key to controlling the Strip. One of these brigades was to the north of Gaza City, one to the east, and one to the south. Another brigade was located in central Gaza, and two were in the south, covering Khan Yunis and Rafah. Most of the combatants were in the three northern brigades. Figure 6 depicts the Hamas deployment of brigades.

Training and External Assistance

The Qassam Brigades received considerable training and assistance both inside and outside of Gaza. Within the Strip, Hamas had a structured training program; in addition, Hamas personnel trained in Lebanon, Syria, and Iran came to Gaza to provide training or other assistance. Specific types of training included rocket and antitank operations and sniping. Some hundreds of leaders of units involved in these activities were also trained outside of Gaza. This training and advice from

TABLE 1. Principal Hamas weapons types

Light infantry weapons	Assault rifles, light machine guns, sniper rifles	Primarily of Soviet/Russian design, but also including U.S.-designed small arms.
Antitank	RPG-7 types	With various types of warheads.
	SAGGER AT-3	Reported in inventory.
	ATGM (antitank guided missile) (AT-4)?	AT-4 seen in photographs of Hamas combatants prior to Cast Lead. AT missiles reportedly fired at IDF armored vehicles during the operation without causing damage.
Antiaircraft	Antiaircraft missiles?	Unidentified (probable SA-7) type reported in media.
	Heavy machine guns (12.7/14.5)	So-called Dushkas.
Mortars	81 mm, 120 mm	Probably of Iranian design/manufacture.
Artillery rockets	90-mm Qassam	Produced in Gaza.
	107-mm Qassam	Produced in Gaza.
	115-mm Qassam	Produced in Gaza.
	122-mm Grad	Imported as components. Iranian design/manufacture.
Mines	Antipersonnel, antitank	
IEDs (improvised explosive devices)	Various types	Produced in Gaza; components/materials smuggled in.
IEDs with EFPs (explosively formed projectiles)	Shawaz	Produced in Gaza.

Hizballah, Syria, and Iran were important, as Hamas had had little opportunity to gain real combat experience against the IDF. For this reason, it drew heavily on Hizballah’s understanding of fighting Israel, creating no techniques on its own except the offensive and defensive military tunnel system inside Gaza.

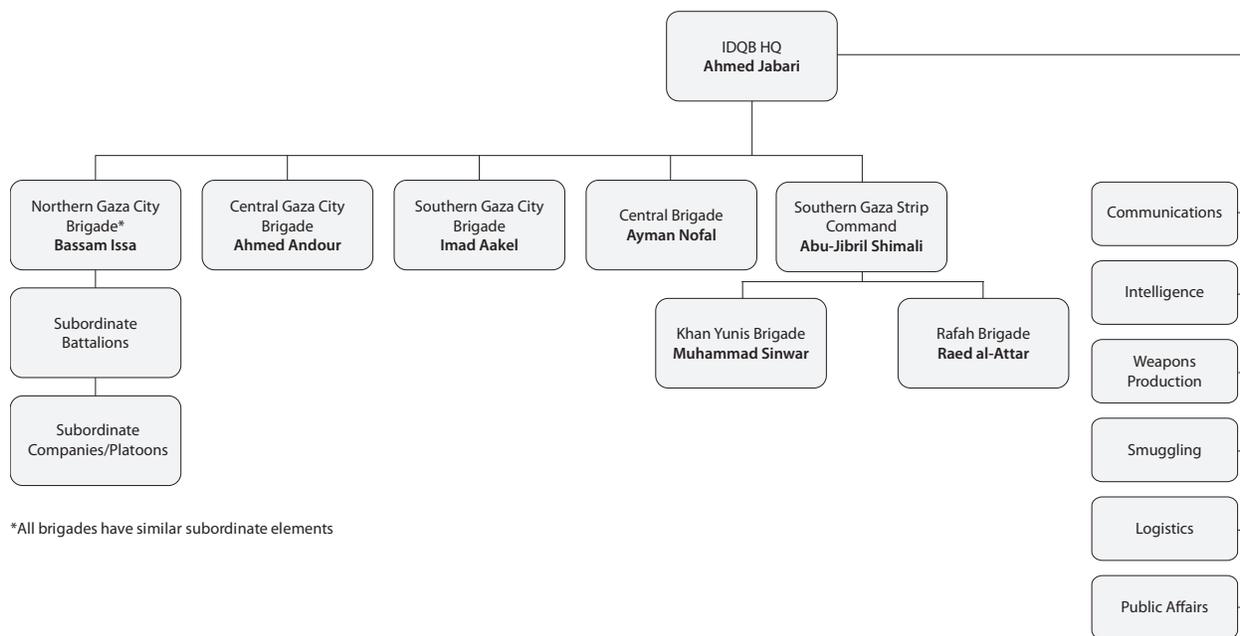
Defensive Plans

Having planned carefully for a major Israeli invasion, Hamas expected to mount an impressive defense. With the assistance of its Hizballah-trained experts, it had established three layers, or lines, of defense against a ground invasion (figure 7).

The first line of defense was located one to two

kilometers inside the border fence, where Hamas planned to draw the IDF into “kill zones” with observation posts, IEDs, mines, ambush sites, and preregistered mortar fire. The intent was to cause casualties, delay and disrupt the IDF advance, and probably determine the scope of IDF operations and identify IDF axes of advance.

Behind the first line was the second line, located on the outskirts of Gaza City, Khan Yunis, and Rafah, with Gaza City the most heavily defended area. The concept was to prevent the IDF from entering the cities and inflicting losses on Hamas’s leadership and infrastructure. In the second line, heavy mortars (120 millimeters), machine guns, antitank weapons, snipers,



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FIGURE 5. IDQB organization

and suicide bombers were organized in ambushes along anticipated axes of advance.

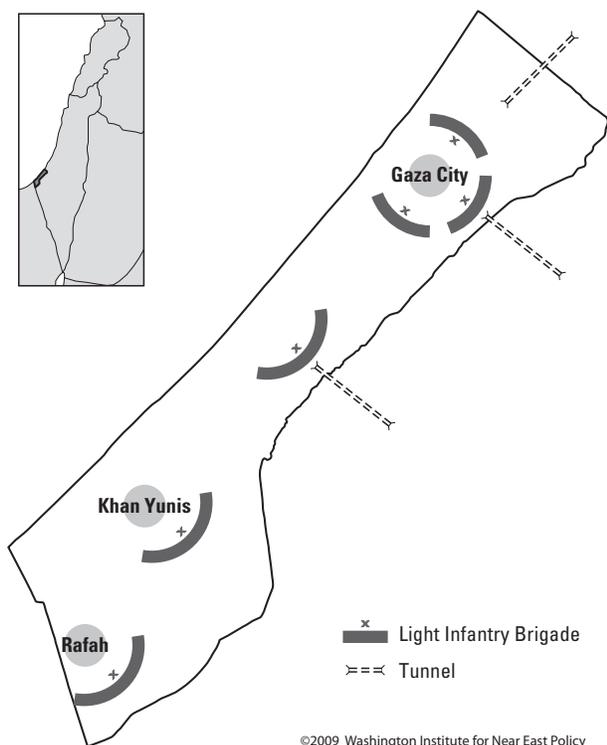
The third line of defense was inside the urban areas, where Hamas had prepared a complex network of tunnels for moving fighters and weapons, positioning snipers, and kidnapping IDF soldiers, as well as an elaborate system of boobytrapped houses. “Explosive areas” were created with dozens of mines and boobytraps to ensnare IDF soldiers and rescuers. This was the main defensive zone, intended to stop any threat to Hamas leaders, whose survival was considered the most important objective.

Hamas also prepared contingency plans for use during the fighting. These included construction of tunnels leading into Israeli territory, to be used to send fighters and suicide bombers into Israel to attack troops and positions. There were similar attack tunnels in the

security zone. By anticipating an IDF division of the Strip and supplying brigades with weapons and ammunition in advance, Hamas helped the Qassam Brigades sustain operations during the war.

Integral to the Hamas defense concept was the use of civilians and civilian facilities as cover for its military activity;³ schools, mosques, hospitals, and civilian housing became weapons storage facilities, Hamas headquarters, and fighting positions, and were used for emplacing mines and IEDs. A map the IDF captured on January 7, 2009, revealed the details of Hamas preparations for combat within Gaza City’s al-Atatra neighborhood, including placement of IEDs and sniping positions, and division of the area into three operational zones.⁴ IDF imagery and combat intelligence revealed extensive use of civilian facilities and adjacent areas for rocket launching sites and other military purposes.⁵

3. Intelligence and Terrorism Information Center, “Gazans Tell How Hamas Used Them as Human Shields,” January 28, 2009, http://www.terrorism-info.org.il/malam_multimedia/English/eng_n/pdf/hamas_e052.pdf.
 4. Israel Defense Forces Spokesman, “Captured Hamas Intelligence, 9 Jan 2009, 16:26 IST,” <http://idfspokesperson.com/2009/01/09/captured-hamas-intelligence-9-jan-2009-1626-ist/>.
 5. Israel Defense Forces Spokesman, “Weaponized Mosque, 13 Jan 2009, 18:30 IST,” <http://idfspokesperson.com/2009/01/13/weaponized-mosque-13-jan-2009-1830-ist/>, and “Intelligence Maps: Hamas Uses Mosques and Schools for Cover, 22 Jan 2009, 12:15 IST,” <http://idfspokesperson.com/2009/01/22/intelligence-maps-hamas-uses-mosques-and-schools-for-cover-22-jan-2009-1215-ist/>.



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FIGURE 6. Deployment of Hamas forces

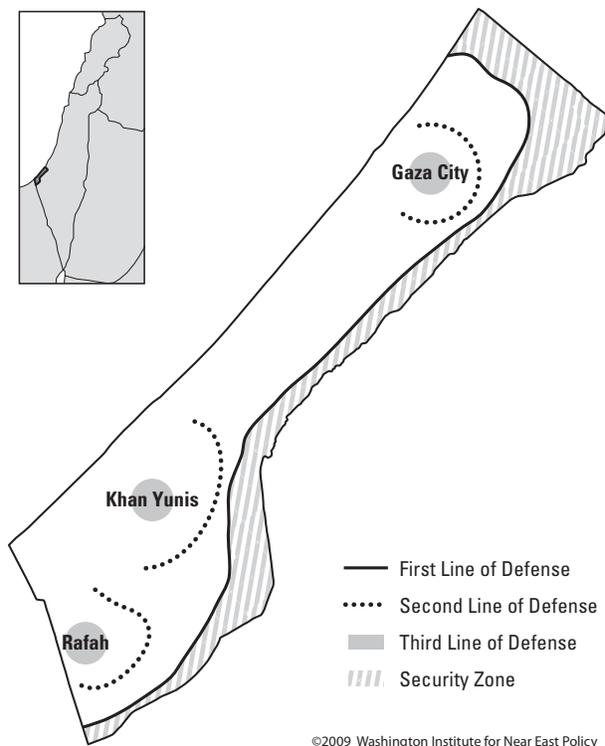
Gaza’s terrain had advantages and disadvantages for Hamas. The main advantage was the densely populated urban areas, which provided cover for the movement’s operations and forces, and which Hamas exploited extensively for offensive and defensive purposes. However, there were several substantial disadvantages. The Gaza Strip is not large (some 140 square miles), ruling out any real possibility of defense in depth or trading space for time. Furthermore, Israeli air, artillery, and intelligence assets covered the entire area from within Israel. The Strip is long (25 miles) and narrow (4–7.5 miles), making it vulnerable to division into zones. The centers of power, including Gaza City, are close to the border, making the distance IDF ground forces would have to penetrate only a few miles. The 51 miles of land border and 40 miles of sea coast offer invading forces numerous locations for entry. There is no serious natural obstacle along the border or within Gaza, except the built-up areas. Hamas attempted to emulate Hizballah’s style of warfare, which was developed on

very different terrain, and these disadvantages proved difficult to overcome.

Offensive Plans

Hamas did not want simply to defend Gaza; it intended to bring the war into Israel. At the heart of its offensive planning were the rocket artillery forces, which it intended to use for sustained strikes on Israeli civilian and military targets. It calculated that the resultant casualties would generate pressure on Israel’s government and military to halt operations in Gaza, demonstrate Hamas’s ability to carry the war to the Israelis, and enhance the organization’s credentials as a “resistance” movement. Sustained firing would also show the impotence of the IDF.

In addition, Hamas hoped to appear victorious by carrying out an act with significance beyond the purely military, such as kidnapping IDF soldiers, destroying tanks, or downing airplanes or



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FIGURE 7. Hamas lines of defense

helicopters. It devoted substantial efforts to preparing for kidnappings and destroying tanks, but when Cast Lead began, it had only a limited capacity—consisting primarily of heavy machine guns—to shoot down combat airplanes or helicopters.

Lastly, Hamas did not expect to face Israel alone; it planned to foment an uprising on the West Bank, and anticipated that Hizballah, Palestinian elements in Lebanon, or both would take action in the north.

4 | Operation Cast Lead

THE IDF HAD ALSO prepared carefully for conflict and developed new methods for conducting asymmetric warfare, including improved equipment, tactics, and organizations for urban combat. It also had enhanced intelligence capabilities, as well as countertunneling equipment and units. There was plenty of time to plan and prepare, and as the ceasefire eroded, the IDF was able to bring to full readiness the forces that would be used in Gaza.

Cast Lead was planned to include three phases; the second and third phases would depend on how the situation developed. Each phase of the operation required a political decision, allowing the Israeli government and military to control the scope of the conflict. The first phase was the air operation that began on December 27, 2008. The second phase was the limited ground incursion, focused on the northern part of the Strip, which was launched on January 3, 2009. The goals and operational execution of the third phase were contingent on how the situation progressed, and in the end, the Israeli government decided not to implement the third phase.

As Cast Lead developed, it was a concerted attack on Hamas, but not an all-out attack. Israel, through an effective denial and deception program, achieved some measure of surprise, and thereafter dictated the pace and direction of events. Hamas forces, infrastructure, logistics, and leadership came under varying degrees of attack, and the organization could do little to disrupt the IDF's actions, or even respond to them. The military course of the conflict was set in Tel Aviv, not Gaza City, and certainly not in Damascus. Table 2 shows the types and varieties of targets struck by the IDF.

Hamas Military Response

Hamas gambled with its decisions not to renew the ceasefire and to escalate attacks on southern Israel. Its attempts to carry out its offensive and defensive plans entangled it in a war whose intensity exceeded its experience, expectations, and capabilities.

Offensive Operations

Hamas's artillery forces, primarily rocket units, carried out the offensive portion of its military operations. Mortar units played a more limited, offensive role. All told, Hamas fired around 600 rockets, including some 400 Qassams produced in Gaza—90 millimeters, 107 millimeters, and 115 millimeters—and about 200 of the longer-range, Iranian rockets (122 millimeters) that had been smuggled into the Strip. Of these, 130 had a range of forty kilometers and 70 a range of twenty kilometers. Some 300 mortar shells were also fired. Of the more than 900 high-trajectory rounds fired, some 700 were aimed at civilian targets, and another 300, primarily mortars, at the IDF. These statistics are shown in table 3.

On the first day of the war, Hamas artillery forces were able to launch about sixty rockets into Israel, but after that, the trend was basically downward. In the

TABLE 2. IDF's comprehensive attack on Hamas

TARGET SYSTEM	TYPES OF TARGETS
Leadership	<ul style="list-style-type: none"> ▪ Senior and midlevel leaders ▪ Military headquarters and leaders' offices
Infrastructure	<ul style="list-style-type: none"> ▪ Government buildings ▪ Police stations ▪ IDQB training facilities
Rocket Artillery	<ul style="list-style-type: none"> ▪ Smuggling tunnels ▪ Production/storage facilities ▪ Launch sites
Logistics	<ul style="list-style-type: none"> ▪ Lines of communication ▪ Weapons and ammunition storage facilities
Forces	<ul style="list-style-type: none"> ▪ Rocket and mortar units ▪ Ground force units ▪ Fortifications and tunnels

first week, the average per day was about forty; in the second, about twenty-two; and in the third, about fifteen. In response to IDF pressure, the Qassam Brigades shifted some firing locations from the north to the center and south and, despite IDF efforts, were able to fire every day of the war. Hamas was also able, by means of rockets with a forty-kilometer range, to bring new targets in Israel within firing range, including Ashdod, Gadera, and Beersheba. As in the 2006 Lebanon War, rocketfire was inaccurate, and most rockets fell without causing harm. However, some rockets did cause casualties, physical damage, or significant psychological harm in communities in southern Israel. Nevertheless, Israel's preparation of the home front contributed to reducing the effects of rocketfire.

Hamas was creative in exploiting its opportunities, using bad weather to keep firing, civilians to transfer rockets within cities, and humanitarian lulls in the fighting to move rockets to be fired when combat resumed. The Hamas rocket system was able to adapt to some extent to IDF efforts to suppress firing and succeeded in the important goal of sustaining attacks throughout the operation, even if at reduced rates.

The reduction in rocketfire was the result of multiple factors: the pace of IDF activity and the heavy fire from IDF units; damage to the rocket production and movement system, especially on the first day of the conflict; the real-time targeting of rocket movements and launch sites and units; launch unit attrition and the resulting deterrence of launch activities; the movement of IDF ground forces into launch areas in the north; and some Palestinians' refusal to allow Hamas to fire from close to their homes. These factors constituted a concerted attack on the rocket system as a whole.

Israeli intelligence services, the Directorate of Military Intelligence (DMI) and the ISA, were a key component of this attack. Their extensive knowledge of Hamas rocket operations, developed prior to the conflict, enabled the IAF to launch very effective strikes against production and storage facilities, launch sites and units, and the tunnel system. As the fighting developed, all source intelligence was fused in real time at joint operations-intelligence cells to support attacks on fleeting targets, including launch teams and

TABLE 3. Rockets and mortar rounds fired into Israel

TYPE	NUMBER
Qassam 90/107/115 mm	400
Long range, 122 mm	
40-km range	130
20-km range	70
Mortar shells	300
TARGETING	
Against civilian targets	700
Against IDF targets	300 (primarily mortars)

teams transporting rockets for firing. The intelligence services also developed information on new targets involved in producing and storing missiles, which were then struck.

Ground Operations

Though the Qassam Brigades had some experience with the IDF, as well as the benefit of Hizballah training and advice, they had not faced an assault on the scale and intensity of Cast Lead and were expecting a short, limited action, consisting primarily of air attacks. If Hamas had judged Israel's capabilities on the basis of Hizballah's experience in 2006, it would have been ill prepared for the IDF of 2008–2009.

The nature of the fighting. Cast Lead saw no major engagements or battles between IDF ground forces and the Qassam Brigades. Generally, the IDF pushed forward step by step, not rushing in, and employing heavy firepower while seeking to avoid combat inside densely populated areas. The engagements took minutes, not hours, as Hamas largely avoided major close combat actions, focusing instead on small tactical attacks with civilian cover in populated areas. Engagements were fought primarily at company level and below, and there was fighting in built-up areas. In one case, the Givati infantry brigade's reconnaissance battalion penetrated

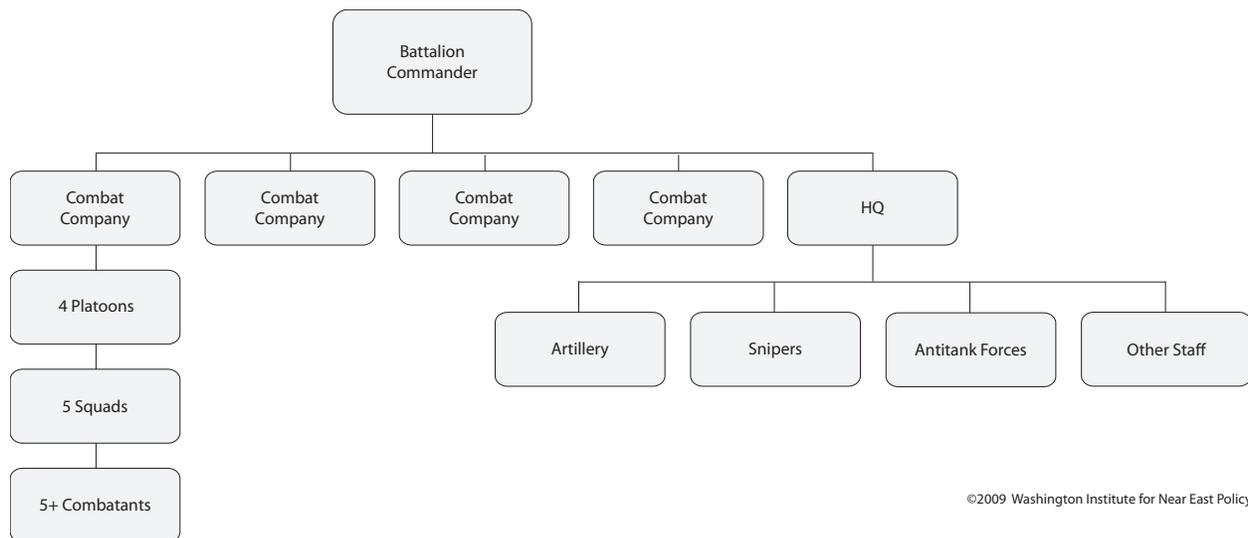
deep into Gaza City and engaged the Qassam Brigades in serious combat.¹

In the first and second defense lines, the Qassam Brigades did not fight effectively. They failed to make much use of mortars, one of their primary weapons; their ostensibly well-trained snipers had little or no success; Hamas antitank capabilities, presumably including advanced systems such as the AT-4 Fagot, also failed; and the extensive system of mines and IEDs slowed IDF movement, but failed to halt it or inflict casualties. Despite the preconflict emphasis by Hamas and media attention, there were very few attempts to use suicide bombers, and no successful kidnappings (though Hamas claimed two partial successes). Reported attempts to employ anti-aircraft missiles were unsuccessful,² and all of Hamas's heavy machine guns were destroyed in the first few days of Cast Lead, leaving its forces with no effective defense against IAF aircraft and helicopters. IDF ground units suffered few casualties in the close engagements that did occur, while Hamas units sustained heavy casualties. In a few engagements, precise intelligence and coordinated heavy firepower combined to rapidly

inflict significant casualties on Hamas defenders. The Qassam Brigades generally displayed a low level of combat proficiency.

Hamas had planned to stand and fight, but the Qassam Brigades proved unequal to the task. Fairly early in the fighting, Hamas fighters began removing their uniforms and donning civilian clothing, further increasing the risk to the civilian population. Units in the field started to break down after a few days, then to disintegrate. Under the weight of IDF fire, IDQB fighters hastily withdrew to the city for cover and concealment. Even in places where they were ordered to hold their positions they abandoned them, preferring to survive rather than to fight. None of their ground combat measures worked, and while this is not surprising, given the difficulties they faced, they certainly failed to match the image Hamas tried so hard to present, of stalwart and proficient Islamic warriors.

Figure 8 shows the structure of IDQB battalions. Hamas was more effective in enforcing its will within Gaza against Fatah personnel and others whom it saw as internal threats, arresting, beating, or killing suspected Israeli agents. This continued even after



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FIGURE 8. IDQB battalion structure

1. Yaakov Katz, "A Necessary Operation," *Jerusalem Post*, August 4, 2009.
 2. Amos Harel, "Sources: Hamas Fired Anti-aircraft Missiles at IAF Planes," *Haaretz*, January 11, 2009.

the ceasefire, as Hamas acted to strengthen its hold on Gaza.

Evaluation of ground combat. Hamas ground forces generally failed, despite extensive preparations. Nothing worked as planned, and no unit was successful in ground combat in any area or by any measure. Although movement leaders and commanders lacked real experience of war, they were overconfident in their ability to fight the IDF.

There are multiple reasons for this failure, the first being the disparity between IDF and IDQB capabilities. The IDF Southern Command used about six combat brigades in the operation, including some of Israel's best units. Israeli ground forces displayed high combat spirit and effectively integrated maneuver and heavy firepower. Troops and commanders were experienced and well trained and were able to adapt to the situation as it developed. Israeli ground commanders accompanied their troops into battle. With a clear advantage in heavy weapons, the IDF was able to use armor, artillery, helicopters, and fixed-wing aircraft without real interference from the Qassam Brigades.

Very importantly, IDF ground forces had a major intelligence advantage, which Israel started building in the wake of the 2006 Lebanon War, and which came to fruition in Cast Lead. Israeli commanders described the war as “unique” in terms of the intelligence support they received and their knowledge of the situation.

Though it employed only a fraction of its combat power, the IDF had overwhelming advantages, all of which it brought to bear in a coordinated and synergistic way, effectively creating a “storm of steel” over Hamas forces.

The Islamic Resistance Movement was simply out-matched, despite its pre-conflict preparations. Its “theory of combat”—its expectations about the nature of war against Israel—was fundamentally flawed. Once the conflict began, command and control of its forces was problematic, and the Qassam Brigades suffered a loss of cohesion as the fighting went against it. All of this must be of great concern to the movement's leadership; Hamas will need to do much more than simply replace ineffective commanders, a process it has already begun.

5 | Overall Assessment

THE GAZA CONFLICT was asymmetric, similar in some ways to the 2006 Lebanon War between Israel and Hizballah. Hamas, in fact, did all it could to emulate Hizballah's capabilities, while the IDF worked hard to avoid a similar outcome. In this case, the IDF was successful, and its Islamic opponent was not. The IDF performed much better in Cast Lead than it had in Lebanon, and Hamas did much worse than Hizballah. Of course, conditions were different, but so was the outcome. Hamas's performance showed that the so-called "Islamic way of war" is not intrinsically effective; flawed planning, poor command, and inferior combat capabilities are as potentially fatal for Islamic warriors as they historically have been for any military—Western, Eastern, or Islamic.

The Balance Sheet: Hamas Failures

While the war's ultimate political outcome remains to be seen, the military outcome is clear. Hamas failed to do any of the following:

- deter Israel from attacking
- inflict significant casualties on the IDF or Israeli civilian population, while suffering substantial casualties of its own
- win any engagement, large or small
- demonstrate tough resistance
- show that its commanders and leaders have personal courage
- prevent Israeli penetration deep into Gaza
- achieve a perception of victory
- constrain the IDF by firing rockets
- gain serious international support, or even much support in the Arab world
- open a new front

At the same time, it exposed Gaza's population to the fighting and suffered damage to its institutions, its government infrastructure, and its ability to rule. Furthermore, a number of important Hamas civilian and military figures were killed in Cast Lead (table 4).

Having lost the initiative with Israel's opening air raids, it was in a reactive mode throughout the fighting. The only effective limits on the IDF were those the Israeli government imposed for operational or political purposes, or to limit Israeli military and civilian casualties. When Israel declared a ceasefire on January 18, 2009, Hamas was at the mercy of the IDF; Israeli decisions, not Hamas military actions, put an end to the fighting.

Hamas had its greatest success with artillery rockets, but was unable to exploit their full potential. This was because of the IDF's comprehensive air-ground attack on the rocket system, coupled with real-time intelligence support for targeting, and improvements in home front defense. Hamas did keep firing, but in a very real sense, it was firing into the air. While this was not a complete success for the IDF, it was significant.

The Balance Sheet: Hamas Successes

In spite of its many failures, Hamas did have some military achievements:

- continuing to fire rockets throughout the operation
- bringing new targets within range by using substantial numbers of long-range rockets
- successful deterrence/defense, since Israel did not occupy all of the Gaza Strip
- some adaptation to changing conditions on the battlefield
- surviving as an organization with most of its leadership intact (most of the leadership)

These are not trivial accomplishments, and Hamas can build on them in anticipation of the next round of fighting with the IDF. Nevertheless, the organization's combat performance was well below its own expectations, and probably those of other observers as well.

The Hamas Story

Prior to Cast Lead, Hamas made much of its military preparations for conflict with Israel. Since the conflict, it has claimed victory, in what Hamas leaders are

TABLE 4. Important Hamas leadership casualties during Operation Cast Lead¹

NAME	POSITION
Abu-Ahmad Ashour	Gaza central district governor
Amir Mansi	Commander of Hamas rocket launching program in Gaza City area
Husam Muhammad Hamdan	Commander of artillery (rocket forces), Khan Yunis
Imam Siyam	Head of rocket infrastructure
Mamduh Jamal	Regional commander (Gaza City)
Muhammad Akram Shibab	Commander of artillery (rocket forces), Beit Hanoun
Muhammad Ibrahim Shaar	Regional commander (Rafah)
Mustafa Dalul	Regional commander (Gaza City)
Nizar Rayyan	Senior military and religious leader
Said Siyam	Hamas “interior minister” (effectively the defense minister)
Tawfiq Jabber	Police commander

calling “the Battle of the Criterion” (*al-furqan*). Khaled Mashal spoke in these terms on January 21, 2009:

This is the first war that our people has won on its land—the first real large-scale war. Therefore, the Gaza war is a turning point in the struggle with the Zionist enemy. With its significance, its accomplishments, its timing, and its greatness, it serves as a cornerstone for an effective and serious strategy for liberation, which begins in Palestine, and will continue everywhere, with the support of the nation.²

Hamas has attempted to create an image of heroic—and

successful—opposition to the IDF’s invasion of Gaza, to support the movement’s broader narrative of “resistance,” its position as the leader of that resistance, and its claim to be the paramount Palestinian political force (figure 9). This attempt obscures, but does not completely hide, the reality of what happened.

The principal elements of the Hamas story include:

- the “heroic” and already “legendary” steadfastness of the resistance
- Israel’s “holocaust” in Gaza (innocent civilians killed, destruction)

1. This table probably understates the casualties within the Hamas and IDQB command structure. Sources: Israel Security Agency, “Operation ‘Cast Lead’: Current to December 27, 2008–January 3, 2009,” <http://www.shabak.gov.il/English/EnTerrorData/Archive/Operation/Pages/Operation-CastLead-3-1-09.aspx>; “Operation ‘Cast Lead’: Special Summary—13 Days of Fighting in the South,” <http://www.shabak.gov.il/English/EnTerrorData/Archive/Operation/Pages/CastLead-SpecialSummary.aspx>; Israel Defense Forces Spokesman, “IDF Targets Senior Hamas Leader,” January 15, 2009, <http://idfspokesperson.com/2009/01/15/idf-targets-senior-hamas-leader-summary-of-todays-events-15-jan-2009-2210-ist/>; “Summary of Today’s Events,” January 10, 2009, <http://idfspokesperson.com/2009/01/10/summary-of-todays-events-10-jan-2009-2115-ist/>; “Summary of Overnight and Morning Activity, January 6, 2009,” <http://idfspokesperson.com/2009/01/06/summary-of-overnight-and-morning-activity-6-jan-2009/>; and Yoav Stern, “3 top Hamas officers among 230 killed during IAF strikes on Gaza,” *Haaretz*, December 28, 2008; <http://www.haaretz.com/hasen/spages/1050449.html>; Amos Harel and Avi Issacharoff, “Intel sources: Gazan informants intercepted by Hamas during war,” *Haaretz*, January 30, 2009, <http://www.haaretz.com/hasen/spages/1059746.html>.
2. MEMRI, “Hamas Leader Khaled Mash’al Claims Victory in Gaza War, Justifies Sacrifices, and Warns against Transferring Aid Money through the PA,” January 22, 2009, <http://www.memri.org/bin/articles.cgi?Page=archives&Area=sd&ID=SP220409>.

- losses inflicted on the IDF, including 49 soldiers confirmed killed (one more than admitted Qassam Brigade losses) and hundreds wounded
- 47 tanks and armored vehicles destroyed
- 12 ambushes
- 19 direct clashes
- damage to 4 helicopters
- the downing of a reconnaissance aircraft (drone?)
- 2 kidnapping operations
- the launching of over 900 rocket and mortar shells

Hamas also claims to have struck military targets, including airfields, military camps, and weapons storage facilities within Israel.⁴ Table 5 shows IDF casualty statistics.

Hamas asserts that its forces prevented the IDF from entering populated areas and that it quickly replaced its own losses through recruitment. More fancifully, it claims that IDF troops were issued diapers because of their fear of confronting the men of the Qassam Brigades. Exploiting the war in its struggle with Fatah, Hamas accused Fatah of supporting Israel and providing it with intelligence.



Invaders Hell – east of Jabalia

January 13th, 2009.

[Editor's note: Quoted as published without correction.]

Zionist losses: Tens of Zionist soldiers were killed.

Al Qassam men managed to sneak behind the enemy lines on the area of "Jabal Al Kashes", a Zionist force contained of more ten tanks and carriers. The mujahedeen exploded two land bombs under two military carriers, then the mujahedeen fired at one of the two military carriers Tandum missile, the carrier was completely destroyed.

After a while, the mujahedeen fired RPG missile at another tank in the same area, the Zionist tanks tried to advance to rescue the targeted tank and the carriers, so the mujahedeen exploded a land bomb under the second tank, and then the mujahedeen withdraw safely from the area.

FIGURE 9. Description of "Zionist losses" from IDQB website³

3. Ezzedeen al-Qassam Brigades Information Office, "Details of Al Qassam Brigades' Operations during the Zionist War on Gaza," January 13, 2009, http://www.qassam.ps/specialfile-255-Details_of_Al_Qassam_Brigades_operations_during_the_Zionist_war_on_Gaza.html. Interestingly, this contains a reference to a "Tandum missile," which indicates possible use of a tandem warhead antitank weapon.

4. Ezzedeen al-Qassam Brigades Information Office, "The Zionist Bases and Military Sites Al Qassam Brigades Targeted," http://www.qassam.ps/specialfile-258-The_Zionist_bases_and_military_sites_Al_Qassam_Brigades_targeted.html.

Table 5. Operation Cast Lead casualties⁵

	KILLED	WOUNDED
Israeli civilians	3	182
IDF soldiers	10 ⁶	336
Total Israelis	13	518
Palestinian civilians	295	N/A
Hamas and other militant organizations	709	N/A
Total Palestinians	1,166	N/A

These claims provide some idea of Hamas's military agenda, the kind of fighting it anticipated, and the goals it would have liked to achieve. They show the gap between the IDQB's desired performance and their actual performance, or, put differently, between the expected combat environment and the reality of combat.

The IDF's Performance

The IDF performed very effectively in the period leading up to the conflict, and during the fighting itself. A full evaluation will require some time, but in all key respects the IDF appears to have done well: planning; preparing forces; achieving surprise; executing the combat plan; coordinating among ground forces, the air force, and the navy; personal leadership of battalion and brigade commanders; combat unit discipline; and soldiers' fighting spirit.

Of particular significance was the very effective intelligence support provided to the operational forces. ISA-IDF cooperation before the war, and especially during the war, was a major factor in the operation's success. Prewar intelligence created a deep target

deck covering Hamas leadership and infrastructure, key combat systems, and forces. This made possible the IAF's effective strike early in the fighting, as well as follow-on attacks. Perhaps even more impressive was the real-time intelligence support provided to IDF air and ground forces during combat. Commanders were given a steady stream of intelligence to support immediate decisions on the battlefield, allowing them to identify, track, and strike fleeting targets with a variety of means. This was instrumental in disrupting Hamas rocket operations at multiple points in the rocket system, defeating the system of mines and IEDs, preventing ambushes and suicide bombings, and fixing and destroying Hamas combat forces, all with very few IDF casualties. While the IDF used heavy firepower to destroy Hamas forces, it did so with excellent intelligence support.

Of course, some will claim that Cast Lead was not a full test of IDF capabilities, that Hamas was not as competent as Hizballah, and that we should not, therefore, make too much of the IDF's performance. Nevertheless, fighting and defeating Hamas was very important militarily, psychologically, and politically, not only for the IDF, but for the Israeli population as a whole. It demonstrated that the IDF could learn from its mistakes and take corrective action, that the fighting spirit of IDF units was strong, and that commanders could, and would, lead from the front. This is also important for Israel's enemies: Hamas clearly got more than it expected. In Cast Lead, IDF soldiers were more motivated and determined than Hamas fighters, and IDF commanders were at the front, not in the rear, in bunkers. IDF weapons, command and control capabilities, and operational intelligence far exceeded those of Hamas. While the IDF should not be complacent, its performance in Cast Lead should increase its confidence in itself, and that of Israel's population and leadership.

5. Source is IDF reporting. Figures are in dispute. According to the Palestinian Center for Human Rights, 1419 Palestinians were killed, including 918 civilians and 252 combatants. Palestinian Center for Human Rights, "PCHR Publishes 'Targeted Civilians' a Comprehensive Report on the Israeli Military Offensive against the Gaza Strip," September 8, 2009, <http://www.pchrgaza.org/files/PressR/English/2009/news/40-2009.html>.

6. Five in direct combat inside Gaza, four by "friendly fire," and one by rocketfire inside Israel.

The Question of “Excessive Force”

Claims by Palestinian and other sources of thousands of civilian casualties; dramatic video and still images of airstrikes and ground operations and their aftermath; and the IDF’s statements that it employed “heavy fire” during the operation have raised a question: Did the IDF use excessive force, resulting in substantial Palestinian civilian casualties? IDF tactics, the dense concentration of civilians in Gaza, and the way Hamas chose to defend the Strip combined to ensure that some number of civilian casualties were an inevitable consequence of the fighting in Gaza.⁷ The question whether the casualties were excessive is a matter of perspective, and of whose casualty count is used as the basis for judgment. We can gain some broader perspective on this issue by examining civilian casualty counts in conflicts in which U.S. or NATO forces employed modern weapons (table 6).

TABLE 6. Civilian casualties from U.S. and NATO operations in representative conflicts

OPERATION/AREA	DATES	CIVILIANS KILLED
Operation Allied Force (Kosovo) ⁸	1999	489–528
Afghanistan ⁹	2008	826

This table suggests that when modern weapons are employed near civilians in military operations, civilians will be killed.¹⁰ It is also evident that heavy firepower served as a force protection measure for IDF units in Gaza, deterring attacks by making it hard for the Qassam Brigades to engage IDF units. For the IDF, this translated into fewer casualties.

Conclusions

Cast Lead was a major military action, but not an all-out war. Neither side utilized all its capabilities, and the action was fought under tight political constraints, at least on the Israeli side. It was not waged with the same intensity as the IDF-Hizballah conflict in 2006, though IDQB units caught in Cast Lead might not have been able to see much difference. Nevertheless, it provides a measure of Hamas military performance, and we can draw some conclusions from the results.

Hamas was tested and found wanting militarily. It has itself recognized this. The Qassam Brigades were a weak imitation of Hizballah, not a budding peer, with few of the attributes that make Hizballah such a formidable asymmetric opponent. While some may argue that Hamas elected to hold back its forces, this seems doubtful: the organization needed to show its power, not hide it. It appears that it tried to do its best but failed to achieve much in the face of a well-prepared and determined IDF.

Would there have been much difference if the IDF had penetrated deeply into built-up areas or seen fit to occupy the whole Strip? There would probably have been some desperate stands by Hamas fighters, even greater attempts to hide behind the population, some increase in IDF casualties, and a substantial increase in civilian casualties as the IDF rooted out terrorism. However, there would also have been a mounting toll of Hamas personnel, increasingly disorganized resistance, the loss of key leadership and cadres, further destruction of facilities and weapons, and disintegration of the organization’s political and combat units. “Broken-back” resistance might have continued for some time, but Hamas would not have been in control of the Gaza Strip.

7. For more discussion on this topic, see Jeffrey White, “Examining the Conduct of IDF Operations in Gaza,” PolicyWatch 1497 (Washington Institute for Near East Policy, March 27, 2009), <http://www.washingtoninstitute.org/templateC05.php?CID=3034>.
 8. Human Rights Watch, “The Crisis in Kosovo,” <http://www.hrw.org/legacy/reports/2000/nato/Natbm200-01.htm>.
 9. United Nations Assistance Mission to Afghanistan, Human Rights Unit, Afghanistan: Annual Report on Protection of Civilians in Armed Conflict, 2008, January 2009, 16, http://unama.unmissions.org/Portals/UNAMA/human%20rights/UNAMA_09february-Annual%20Report_PoC%202008_FINAL_11Feb09.pdf.
 10. For a useful perspective on combat and civilian casualties in asymmetric conflicts, see Richard Kemp, “Hamas, the Gaza War and Accountability under International Law” (address to the Jerusalem Center for Public Affairs, Joint International Conference, June 18, 2009), http://www.jcpa.org/JCPA/Templates/ShowPage.asp?DRIT=0&DBID=1&LNGID=1&TMID=111&FID=378&PID=0&IID=3026&TTL=International_Law_and_Military_Operations_in_Practice.

Hamas lessons. For Hamas, the war posed many challenges and raised many questions about its combat capabilities. The movement undoubtedly has its own reasonably accurate balance sheet regarding its performance in the conflict.

Offensively, Hamas will likely follow in Hizballah's footsteps by acquiring more, longer-range, and more accurate rockets with more powerful warheads to improve its rocket force capabilities. It will also likely seek better ways to protect its rocket forces from Israeli attack.

Defensively, Hamas had no answer to IDF air and ground capabilities. As its plans for Gaza's defense basically failed, we can expect changes in equipment and doctrine. It is already attempting to bring more and better antitank and anti-aircraft weapons into Gaza, but acquiring weapons is quicker and easier than integrating them, and developing and implementing new doctrines and plans to take advantage of them. Over time, Hamas can be expected to make these more difficult changes in its forces.

More generally, the movement has recognized the problematic performance of its commanders and combatants, and it has already replaced some brigade and battalion commanders. Other measures to improve the Qassam Brigades will likely be instituted, though its problem cannot be fixed quickly. In fact, Hamas will need a comprehensive long-term effort to achieve marked improvement.

Will the organization learn these lessons? Hamas has a method of learning based on internal expertise, foreign advice, research and analysis, and self-examination. It will conduct a serious internal debriefing, gain from the Cast Lead experience, and adapt. No matter what Hamas leaders say publicly, they know what really happened, and they will act accordingly.

The next round. When Cast Lead ended in January 2009, there seemed to be much unfinished business, and another round of fighting appeared likely, perhaps sooner rather than later. This, however, now seems less definite: Hamas is talking nicely again, making cooing sounds for Western Europe and the United States. It needs a period of quiet to consolidate control in the Strip, reduce the economic and social burden on the population, and rearm and refit its military. It has been suppressing rocketfire, and it shows no inclination to let other organizations drag it into another crisis. For now, this also suits Israel's government, though there are certainly those in Israel who wish to finish what Cast Lead started. Almost three years of quiet in southern Lebanon has shown that a ceasefire between asymmetric opponents can hold for some time even if there is no basic change in attitudes, policies, or intentions. Fighting releases tension, and it normally takes some time for the tension to build up again. More importantly, being pounded in battle with little to show for the experience has a way of instilling caution.

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