

# Hamas and Its Long-Range Rockets: Military and Political Implications

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Nov 17, 2009

## ABOUT THE AUTHORS



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## Brief Analysis

This is the second of a two-part series examining recent military developments involving Hizballah and Hamas. [PolicyWatch #1600 \(http://www.washingtoninstitute.org/templateC05.php?CID=3139\)](http://www.washingtoninstitute.org/templateC05.php?CID=3139) examined the implications of the recent intercept by the Israeli navy of a large Iranian arms cargo intended for Hizballah.

The Israel Defense Forces (IDF) recently monitored the launch of a 60-km-range artillery rocket from Gaza into the Mediterranean Sea. Israeli military intelligence has assessed that the rocket was launched by Hamas and originated in Iran. A rocket with such a range, when fired from Gaza, can reach the southern outskirts of Tel Aviv as well as targets across much of southern Israel.

This recent launch occurs amid Hamas's efforts to build a serious long-range rocket force centering on weapons with a 40- to 60-km range. Such a plan creates military instability for the Israelis and strengthens Hamas politically in its struggle with Fatah. Weapons capability of this level could also be a potential spoiler in any Palestinian negotiations with Israel.

### Hamas Builds a Long-Range Rocket Force

While the specific type of rocket tested was not identified, according to Israeli sources it was probably five meters long with a 45-kg warhead. The weapon's range could be increased by reducing the size of the warhead, so 60 km is not necessarily the maximum. In fact, according to Amos Yadlin, IDF director of military intelligence, Hamas now has "dozens" of rockets with a 60-km range.

### New Capabilities

Long-range rockets provide Hamas with an array of capabilities that pose problems for the IDF and the Israeli government. With Hamas's ability to strike deeper into Israel comes an increased burden on civil defenses, a higher likelihood that civilian life will be disrupted in larger swaths of the country, and possible further complications for military operations. During the IDF's Operation Cast Lead in Gaza earlier this year, Hamas attempted to target military facilities, including airfields, military camps, and weapons storage facilities, albeit with little success. A rocket with a 60-km range and a 45-kg warhead potentially has greater destructive ability than the 40-km rockets

with smaller warheads used by Hamas in the past. This is the case especially against facilities that have not been substantially hardened.

#### Issues Associated with the New Capabilities

The true significance of Hamas's long-range rocket force depends on a number of factors. To begin with, the number of rockets possessed by Hamas will influence its ability to maintain rocket firings during combat and to inflict damage. These types of weapons are inherently inaccurate, and it is necessary to fire many to ensure that even large targets are hit. In addition, large numbers of falling rockets have a greater impact both politically and psychologically than smaller numbers. Warhead size and type are important as well. The warheads carried on the 60-km rockets may be improved conventional munitions with greater terminal effects (blast or fragmentation), such as Hizballah used in the 2006 Lebanon war.

While the new weapons provide new opportunities for Hamas, they also pose a challenge. To fully exploit the potential of these weapons, Hamas needs to create an intelligence apparatus that allows for fire to be adjusted and damage assessed. At present, Hamas probably lacks much capability in this area, but the group could obtain limited information from news reports and observers on the ground. The longer-range missiles also have a larger "signature" in terms of storage facilities and firing units; additionally, they are more conspicuous when moving. These factors place them at higher risk of discovery and destruction by Israeli forces.

Hamas will have to develop a concept of operation for employment of the new long-range rockets, as well as determine who controls and operates them. In this process, Hamas leaders will need to consider carefully how Israel might react to attacks both on main population centers and that threaten to disrupt Israeli military operations.

#### IDF Response

The IDF will need to address the problem of Hamas's long-range rockets, much as it addressed Hizballah's long-range rockets in 2006. As shown by its efforts during the 2006 war and Operation Cast Lead, Israel has both a strong understanding of the threat and substantial capability to deal with it. Furthermore, Gaza offers a different military environment from southern Lebanon, in many ways less challenging for the IDF. Gaza's land mass is much smaller than that of southern Lebanon and therefore easier to cover with intelligence and strike assets. In addition, Hamas's new weapons require larger launchers -- in turn requiring larger crews -- which would likely have a short operational life, based on Israeli Air Force response times in the 2006 war and Operation Cast Lead. Given the potential threat, Israeli intelligence services will likely place a high priority on locating storage depots and launchers for long-range rockets, as well as their crews and commanders. Once identified, all components of the long-range rocket system will be targeted by Israeli air and ground forces, as occurred during Cast Lead.

Israel's capability for dealing with the rocket threat is improving. By the middle of next year, Israel will probably be ready to deploy the Iron Dome antirocket system, which will be capable of destroying at least some incoming rockets. Enhanced civil defense measures include the rocket attack warning system, provision of hardened shelters, and coordination of medical and other emergency services. Collectively, these defensive measures reduce but do not eliminate the threat from Hamas rockets.

#### Implications

As a result of Hamas's development of a long-range rocket force, future military conflicts with Israel will almost certainly be more intense, cover a broader geographic area, and produce more destruction in both Israel and Gaza as the IDF acts to destroy the rockets. Hamas's new rocket capabilities must also be seen in the context of Hizballah's acquisition of rockets with a 300-km range. In a possible two-front war, this means that most of Israel, including Tel Aviv and Jerusalem, would be within the range of Hamas or Hizballah rockets.

Through its growing rocket capabilities, Hamas is weakening the measure of deterrence established by Israel through Operation Cast Lead. And while Hamas has been careful since Cast Lead to avoid actions that would lead to renewed hostilities, its growing military capabilities may generate internal pressure to use its rockets or undertake other destabilizing actions. In December 2008, Hamas miscalculated gravely with respect to Israeli intentions and its own capabilities, sparking an intense conflict. There is no guarantee this will not happen again.

The creation of a long-range rocket force reinforces Hamas politically by enhancing its image as a "resistance" movement and its role as a spoiler and competitor to Fatah. Expanded military capacity also lends greater weight to the organization's hard-line "military wing."

From Israel's standpoint, the potential political effects of threats to large population centers will likely make the government more willing to deal decisively with a revamped threat from Hamas. This would probably mean a comprehensive air and ground offensive throughout Gaza -- one that would far exceed the scope of Cast Lead.

## Conclusion

The punishment dealt by the IDF during Operation Cast Lead has translated into a measure of deterrence against Hamas. Maintaining such a level of deterrence will require occasional military action in Gaza and transmission of appropriate warnings. A steady improvement in active and passive defenses will help as well. Nevertheless, deterrence will likely fail at some point, and should this occur, Israel will probably act sooner and more intensively against Hamas.

As with Iranian arms shipments to Hizballah, the international community could do more to impede arms shipments to Hamas. Gaza is more isolated than Lebanon, and Hamas is much more vulnerable to antismuggling measures than Hizballah. Egypt has already increased its efforts to police its border with Gaza, but additional measures are needed to disrupt the smuggling system within Egypt and to stop Iranian arms shipments at sea.

Jeffrey White is a defense fellow at The Washington Institute, specializing in the military and security affairs of the Levant, Iraq, and Iran. He is the author of the recent Institute Policy Focus  [Hamas in Combat: The Military Performance of the Palestinian Islamic Resistance Movement](http://www.washingtoninstitute.org/templateC04.php?CID=318)

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