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Would They If They Could?

By Gary Ackerman & Laura Snyder

Given the continuing escalation of violence in the Israeli-Palestinian conflict, how likely is it that one or another of the terrorist groups involved in the struggle will eventually use a weapon of mass destruction (WMD)?

By late March, it seemed as if there would be no end to the renewed violence of the “Al-Aqsa Intifada,” which began in September 2000 and was exacerbated by the election of Israeli Prime Minister Ariel Sharon in February 2001. Palestinian anger at Sharon’s election reflects both his anti-Palestinian reputation in general, and his reputed role in the 1982 massacre of Palestinian refugees in Lebanon.

The offensive against Israel has been conducted on two fronts, with actions by the Palestinian Authority and its constituents, as well as actions by several well-known terrorist groups. Palestinian Authority Chairman Yasir Arafat maintains that these groups— Hamas, Hizbollah, and Islamic Jihad—operate independently. But Sharon and the Israeli government believe that Arafat is at least indirectly responsible for their behavior.

Some consideration should be given to the militants within the Fatah faction of Arafat’s Palestinian Authority— Fatah Tanzim and the Al-Aqsa Martyrs Brigades (a recent militant offshoot of Fatah). These militias have contributed to the increasing violence in Israel and the Occupied Territories. In the first three months of 2002 alone, members of the Al-Aqsa Martyrs Brigades claimed responsibility for multiple attacks that killed more than a dozen Israeli soldiers, destroyed an Israeli tank, and included a suicide bombing on March 9 that killed 11 and wounded 50.

Despite vicious attacks on Israeli civilians, similar to those carried out by the fundamentalist terrorist groups, these groups are at least nominally wedded to a political solution to the conflict and profess allegiance to Arafat. There is also neither evidence to indicate that Fatah Tanzim or the Al-Aqsa Martyrs Brigades have ever considered using WMD, nor that they have any means to do so. This analysis therefore focuses on groups with a longer history in the region—groups with sufficient organizational experience and ideological background to allow an assessment of the potential WMD threat they pose.

In any case, by late March, even as U.S. envoys attempted to broker a cease-fire and set the scene for renewed peace talks, tit-for-tat terrorist attacks and heavy-handed Israeli retaliation were continuing.

Although the number of suicide attacks and Israeli retaliatory strikes increased in the early part of the year, no Middle Eastern terrorist group has yet employed weapons of mass destruction on a large scale. Yet the escalation of violence in terrorist attacks in general—including the September 11 attacks against the United States—would seem to suggest that the possibility could be growing. In the August 13, 2001 edition of the Palestinian weekly *Al-Manar*, Abu-Khosa Taufiq, the deputy chairman of the Palestinian Center for Information Services-Gaza, called for “weapons of deterrence”—including biological or chemical weapons—to help redress the conflict’s military imbalance.

Group profiles

Hamas, Hizbollah, and Islamic Jihad all have political and nationalistic components as well as religious aims. For instance, each has demanded the establishment of Palestinian sovereignty over the territory of Israel.

But it is the groups' fundamentalist religious core that concerns experts on terrorism. Extreme Islamist groups view the world through a radical lens, interpreting their religion as encouraging the use of any means possible to destroy "the Infidel"—even though the Koran is more commonly interpreted as forbidding mass or indiscriminate violence.

In the hands of the extremists, Koranic proscriptions against violence are reinterpreted to justify suicide bombings and similar acts.¹ In this way, argues terrorism expert Bruce Hoffman, religion can act as a "legitimizing force," lowering inhibitions against causing mass casualties.² Hoffman and other experts believe that religion-based terrorist groups are among the most likely to seek weapons of mass destruction.

Whether a group's aims are political or religious, however, the group would face considerable technical obstacles before it could carry out a plot involving weapons of mass destruction. Those who consider full-scale WMD terrorism to be unlikely point out that even groups wanting to use weapons of mass destruction must first acquire precursor materials before beginning the painstaking, potentially dangerous, and often unsuccessful task of trying to convert the materials into weapons.

Hamas

Hamas invokes its political and social agendas, as well as its religious ideology, to justify its activities.

Many argue that as one of the larger and more developed organizations of its kind in the region, Hamas would be reluctant to use weapons of mass destruction because of the political and physical costs that would likely follow. Yet the group's military wing—the Izz al-Din al-Qassam—is a loosely constructed fraternity, comprised of an unknown number of individual cells, some perhaps as small as three or four members. If Hamas were to amass chemical, biological, nuclear, or radiological weapons, decentralized decision-making could increase the possibility that an isolated cell might commandeer WMDs and use them without the approval of the group's leadership.

Hamas could be further motivated to use weapons of mass destruction if members of the group believed Israel had already broken the taboo by using unconventional arms against Palestinian civilians. As senior Hamas member Dr. Abd al-Aziz al-Rantisi argued in 1997, "Israel should be confronted by the same methods they are using." If, for instance, group members believed allegations that Israelis had attempted to use poison gas against the Palestinians or employed toxins in assassination attempts, they might be motivated to respond in kind.

Hamas members tend to be well educated, and many senior members have graduate degrees in engineering, chemistry, physics, and medicine. The group is known as an organized, experienced, and capable organization. Its highly trained members have already developed explosive devices using chemicals and are undoubtedly capable of developing at least crude weapons of mass destruction.

In November 1999, there were reports that Israeli security forces, in cooperation with the Palestinian Authority, had foiled a Hamas plot earlier that year to conduct a chemical attack in Israel before the Knesset elections in May.³ Authorities apparently arrested a Hamas militant in possession of instructions on developing chemical weapons. In addition to this incident, Hamas is said to have obtained potential chemical and biological components from Israeli hospitals in 1997.⁴ A documentary by terrorism expert Steve Emerson claimed that a Hamas

plot to poison Israeli food and water supplies was uncovered during an arrest in 1998.⁵ On June 19, 1999, the newspaper *Yidiot Ahronot* reported another Hamas plot to poison Israeli water supplies.

On March 6, 2000, *U.S. News and World Report* reported that a “harmless chemical residue” believed to be insecticide was found on a piece of shrapnel from a Hamas bomb. Some counterterrorism experts believe the bomb may have been an experimental chemical weapon. On November 29, 2000, the *Jerusalem Post* reported that Hamas bomb-maker Ibrahim Beni Ouda, who died that day in a car explosion, might have been developing a chemical weapon.

In February 2000, George Tenet, the director of the U.S. Central Intelligence Agency, told the Senate Select Committee on Intelligence that Hamas was among the groups his organization suspected of working toward WMD capability.

Hamas seems to be experimenting with different kinds of bombs in a probable effort to inflict higher numbers of civilian casualties. Hamas suicide bombers increasingly use nails and metal fragments in their homemade bombs.

There have also been reports of Hamas members adding pesticides and other crude chemicals to their explosives, indicating a willingness to experiment with chemical substances. The explosive device in one of two Hamas attacks last December 8 was described as having been “dipped in pesticide.”⁶ On December 10, a Hamas suicide bomber in Haifa was shot dead after he had detonated one bomb and was reaching for a second. Authorities believe the second, larger bomb was packed with chemicals.⁷ After this attack, an Israeli government spokesperson said that the use of poisonous agents “shows the direction these terrorists are moving.” The Israeli police commissioner said there had been “at least six or seven” crude chemical bombings in the last five years.⁸

Not all allegations of Hamas’s experimentation with chemical weapons can be confirmed, and some statements about chemical weapons have been extracted under interrogation. Taken collectively, however, the evidence suggests that Hamas is at least dabbling in weapons of mass destruction.

Hizbollah

Much like Hamas, Hizbollah holds an intense hatred for Israel that has, at times, pushed the group to conduct indiscriminate acts of violence against Israeli civilians—as well as against U.S. troops in the region. In October 1983, a suicide bomber believed to be connected with Hizbollah exploded a truck bomb at the U.S. marine barracks in Beirut, Lebanon, killing 241 marines. As Hussein Mussawi, former leader of Hizbollah, explained, “We are not fighting so that the enemy recognizes us and offers something. We are fighting to wipe out the enemy.”⁹

One factor separating Hizbollah from the other two groups discussed in this article is its perceived success in forcing the Israeli military out of southern Lebanon. Since Israel withdrew in May 2000, Hizbollah has had considerable political success, winning nine parliamentary seats in Lebanon’s September 2000 election. Some believe that Hizbollah’s success as a political party may eventually preclude acts of violence, but the group has yet to renounce terrorism. And any reluctance its leaders have to attacking Israel may not last if Israel continues its actions against the Palestinians.

For a non-state actor, Hizbollah has an impressive arsenal of conventional weapons. Raids on Hizbollah strongholds have uncovered rocket launchers, small arms, thousands of rounds of ammunition, mortars, and grenades, many of which come from Iran. There have been several reports that in addition to its arsenal of conventional weapons, it has been amassing anti-personnel chemicals. On January 29, 2000, Turkish security officials discovered 12 tear gas bombs in a Hizbollah-owned shelter.¹⁰ A similar search operation two weeks later uncovered eight units of “chemical substances” in addition to numerous conventional arms.¹¹ As reported the next day in *The Independent*, on October 7, 2000, Hizbollah guerrillas used tear gas canisters against a group of Israeli soldiers in Shibaa, Lebanon.

These incidents may be a far cry from evidence of WMD capability, but they indicate a willingness and ability to employ more diverse weapons than guns and mortars.

On February 19, 1998, ex-CIA Director James Woolsey claimed that members of Hizbollah had acquired chemical and biological weapons.¹²

Of the three groups discussed here, Hizbollah arguably has the most highly developed conventional capability, and the closest relationship with a well-equipped state sponsor, Iran. On the other hand, other than the Woolsey statement, there is little to suggest that Hizbollah is actually involved with weapons of mass destruction.

Islamic Jihad

In 1999, Omar Bakri Mohammed, an Islamic cleric with ties to Islamic Jihad (and to Hamas), proclaimed: “If any Muslims are under occupation by a Western force, they can use any weapon to survive, and that includes biological weapons.”¹³ Islamic Jihad itself has made few statements specifically voicing an intent to use weapons of mass destruction, but Jihad members have expressed a commitment to the destruction of Israel by any means necessary.

On June 2, 2000, the *San Francisco Chronicle* reported that Islamic Jihad and the government of Iraq had attempted to acquire fissile nuclear materials from Russia. According to the *Chronicle*, the group offered Russian nuclear workers more than \$1 billion for an undisclosed quantity of highly enriched uranium and weapons-grade plutonium.

It is unlikely, however, that even if enough fissile material were available, Islamic Jihad would be able to construct a nuclear weapon. On the other hand, the group might find it considerably easier to produce a “dirty bomb” that would disperse radioactive contamination.

Islamic Jihad is reportedly also interested in bioweapon capabilities. In April 1998, one of the group’s leaders, Nassar Asad Al-Tamimi, mentioned the possibility of acquiring biological weapons for use against Israel: “Jihad has at last discovered how to win the holy war—lethal germs.”¹⁴ Al-Tamimi’s statement raises the suspicion that Islamic Jihad may have a bioweapon capability or, at the very least, is interested in obtaining one.

In February 2001, Islamic Jihad reaffirmed its commitment to holy war against Israel. In response to the election of Ariel Sharon as Israel’s new prime minister, the group’s leader, Abdullah Shami, said, “The choice of holy war will never stop. . . . We confirm that the bombing missions will continue to create a balance of terror.”¹⁵

Although very little is known about the group’s technical capabilities, it could gain access to weapons of mass destruction through its sponsors. Sheikh Omar Bakri Mohammed, who has acted as a spokesman for Osama bin Laden’s World Islamic Front for Jihad against Jews and Crusaders, admitted that the bin Laden group participates in fundraising for Hamas, Hizbollah, and Palestinian Islamic Jihad. The group may have a relationship with bin Laden and Al Qaeda, and may possibly have working relationships with Iran, Libya, and Iraq.

Helping hands

The easiest way for a terrorist group to acquire highly destructive weapons is to get them from state sponsors of terrorism—and many of the states identified as sponsoring terrorism are also believed to be attempting to acquire weapons of mass destruction for themselves. Under some circumstances, these states could decide that they would derive practical utility from their limited WMD arsenals only if they could deploy them covertly—perhaps by using their terrorist friends as deliverymen.

Such states would, however, want to be able to maintain “deniability.” If a target state or the

international community should discover (or perhaps only suspect) that a country may have handed over a nuclear bomb or a bioweapon to a terrorist group, retribution would be almost certain. While they are happy to supply terrorists with conventional arms, finances, and training, most state sponsors of terrorism would ordinarily have little incentive to supply terrorists with weapons of mass destruction.

Maintaining deniability would likely be easier with some types of weapons than with others—for instance, biological agents may be dispersed in ways that emulate a natural outbreak of disease. And one cannot discount the possibility that rogue elements within a government—an extremist clique within Iran’s intelligence apparatus, perhaps—might take more risks than the government as a whole would wish to take.

Iran. Of all the state sponsors of terrorism, Iran is viewed as the most energetic, supporting both Sunni and Shi’a groups.¹⁶ The election of a relatively moderate president, Mohammad Khatami, has done little to halt this behavior. Radical conservatives are still in control of the military and intelligence services, and it is estimated that Iran provides more than \$100 million annually to terrorist organizations.¹⁷ Iran’s terror-sponsoring activities are directed mainly by the Islamic Revolutionary Guards Corps, which is also responsible for Iran’s WMD programs and is controlled by hardline ayatollahs.

In April 2001, Tehran reiterated its unflinching support for terrorist groups working against Israel by hosting the International Conference on the Palestinian Intifada, which was convened by the Iranian parliament. The leaders of all three groups were invited, presumably to encourage greater cooperation among them in their campaigns against Israel. At the conference, Iran’s religious leader, Ayatollah Khamenei, repeated his description of Israel as a “cancerous tumor” to be removed.¹⁸

Libya. Once considered the leading sponsor of international terrorism, Libya appears to have retreated from the limelight. In addition to handing over the bombers of Pan Am Flight 103, Libya’s leader Muammar Qaddafi has reportedly cut ties with some radical groups, and Hamas is believed to be among the groups that have lost his support.¹⁹ Nonetheless, the U.S. State Department maintains that Libya has continuing contacts with other terrorist groups, including Islamic Jihad. U.S. government officials continue to be concerned about Libya’s ties to terrorist groups, particularly because of the country’s known chemical weapons capability and its continuing relationship with Iraq. The true extent of Libya’s past dealings with terrorist groups is also unknown.

Iraq. The real enigma among state sponsors of terrorism is Iraq. While not nearly as prominent as Iran, Iraq has a history of working with several terrorist organizations. Although historically it has not been close to Islamic fundamentalists, Iraq has come out strongly in support of their actions in Israel.²⁰ The reported meetings of Mohammed Atta, the leader of the World Trade Center attacks, with Iraqi intelligence officials could indicate increased ties with fundamentalist groups.

Although Iraqi leader Saddam Hussein has shown himself to be irascible, he has generally been astute enough to refrain from any actions that might jeopardize his leadership position. On the other hand, if his regime were directly threatened (a distinct possibility in light of recent U.S. statements) there is the danger that he might distribute to terrorist organizations whatever portion of his WMD arsenal he is unable or unwilling to use himself.

Al Qaeda. Osama bin Laden’s organization has been linked to the training and funding of a number of terrorist groups—including Hamas, Hizbollah, and Islamic Jihad. Reports suggest that members of all three groups have trained in camps in Afghanistan and Pakistan, which would have provided them with an opportunity to interact and perhaps to combine their efforts.²¹ In April 2001, Israeli authorities accused bin Laden of attempting to establish a terrorist network in Gaza. After the September 11 attacks, bin Laden repeatedly linked his acts to the Israel-Palestinian conflict, saying “Americans will never know peace until the Palestinians do.”

As investigations in Afghanistan and elsewhere have revealed, bin Laden and his network have been trying to manufacture or obtain weapons of mass destruction. At the time of the first U.S. air strikes on Afghanistan in October 2001, the group probably had a crude chemical weapons capability, and possibly a biological capability as well.

At this point, there is no way to know what bin Laden does and does not have in terms of destructive capabilities. But his willingness to inflict mass casualties is no secret—the question is whether he would be prepared to share any WMD capabilities with Palestinian terrorist groups.

The most likely source?

Of the state and stateless sponsors of terrorism in the Middle East, Libya would seem the least likely sponsor in a WMD terrorism scenario: There is no evidence to suggest that Qaddafi would currently risk supplying any terrorist group with WMD.

Iran, on the other hand, is a different case. Although most of the country's leaders would probably eschew such a move, it is at least possible that in a regional security crisis parts of the Iranian regime loyal to the most militant clerics might make materials available to groups such as Hizbollah, with which Iran has had an intimate relationship in the past.

Saddam Hussein also remains a threat. If he believed his regime's survival was directly threatened—for example, if he faced a full-scale U.S.-led attack—he could consider using terrorists to mount a WMD attack against Israel in order to affect the strategic balance.²²

Then there are the outstanding questions about bin Laden—where is he? Where is his limited WMD arsenal? Routed in Afghanistan and on the run, is he more or less likely to hand over WMD materials to the terrorist groups with which he has ties?

Eroding constraints

The conventional theory of terrorism held for many years that terrorists were unlikely to use WMD because:

- large numbers of casualties were unnecessary to convey a symbolic message to the terrorists' perceived enemies, and
- mass-casualty attacks could result in the loss of the much-sought after approval and support of the wider group that the terrorists claimed to represent.

These assumptions do not necessarily apply to religion-based groups, however. The aims of these groups can extend beyond the symbolic to the annihilation of any and all perceived enemies.

Further, despite their political components, all three groups are predominantly religious in character and thus less responsive to potential political or national constituencies and more prone to act on their own. Moreover, in the current conflict, the evidence suggests that their constituencies are becoming more supportive of indiscriminate attacks.²³

The argument most often relied upon by counterterrorism experts who have dismissed the danger of WMD terrorism in Israel is that terrorist groups would never use WMD because the Muslim and Jewish populations are closely intermingled, especially in the occupied territories. There are many areas within Israel where the population is almost exclusively Jewish, however, and even in the occupied territories, Jewish settlements could conceivably be targeted by a skillful use of limited attacks. The more desperate these groups become, the more risks they may be willing to take.

Upping the ante

The September 2001 attacks on high-profile U.S. targets, combined with the escalating violence in Israel and the occupied territories, indicate an increased willingness by terrorists to inflict mass casualties. But this is not to say that terrorist groups in the Middle East will rush to give up their tried-and-true guns and explosives in favor of weapons of mass destruction. After all, the situation is already dire, yet no group has escalated to WMD. Nonetheless, there is at the very least circumstantial evidence that all three groups— Hamas, Hizbollah, and Islamic Jihad—have taken an active interest in WMD.

The more fanatic beliefs of these groups help make them psychologically capable of inflicting mass casualties. If the current conflict worsens and a sense of desperation sets in, individuals may become less rational. Existing shackles on their desire to use WMD—such as concerns about Palestinian casualties and popular support—may begin to fall away.

As for the capability to conduct a mass-casualty WMD attack, it is theoretically possible that a group acting on its own might develop and weaponize sufficient WMD agents. With its pool of technical members, Hamas is probably the most capable of acting independently. At this time, Hamas would probably produce a relatively crude weapon, incapable of inflicting truly massive numbers of casualties, but the indigenous capabilities of all three groups are likely to improve over time.

More immediately worrisome, a further escalation in the conflict may spark an emotional or opportunistic reaction from sponsors of terrorism, who might decide to supply these extremist groups.

This, of course, is only a provisional analysis. The authors are not forecasting the use of weapons of mass destruction by Middle Eastern terrorist groups. Rather, we believe our analysis shows that an escalation to WMD is a credible concern that cannot be dismissed out of hand. At the very least, Israeli civilians and security planners should factor in the possibility that these weapons may eventually be used in their conflict with the Palestinians.

Gary Ackerman is a research associate at the Monterey Institute of International Studies, focusing on weapons of mass destruction terrorism. Laura Snyder is a research assistant in the program. This article relied in part on the Monterey Institute of International Studies Weapons of Mass Destruction Terrorism Database.

1. See Sheik Yusuf Abdullah al-Qardawi's statement that "All Israeli society is a military society. . . . They are not civilians, and killing them is permitted by Islamic Law." "Muslim Figure Defends Hamas 'Jihad' Operations," *Al-Sabil* (Amman), March 19–25, 1996.
2. Bruce Hoffman, *Inside Terrorism* (New York: Columbia University Press, 1998), p. 94.
3. "Chemical Attack by Hamas Said Foiled 'Several Months Ago,'" Jerusalem Channel 2 Television Network in Hebrew, November 8, 1999; Federal Broadcast Information Service (FBIS), November 10, 1999.
4. "Preparation for CB Attack Viewed," *The Jerusalem Report* in English, March 29, 1999, FBIS document I.D. FTS19990320000602.
5. Steve Emerson, "Hamas Plans Bio-Terror in Israel," Center for Israeli Civilian Empowerment, February 27, 1999 (www.geo.cities.com/CapitolHill/Congress/7663/casualties.htm, accessed June 28, 1999).
6. "Truce Offer Collapses," *Herald Sun*, December 11, 2001.
7. Daniel McGrory and Christopher Walker, "Suicide Bomber 'Was Planning Chemical Attack,'" *Times* (London), December 10, 2001.
8. Clyde Haberman, "Toxic Traces After Bombing Add to Jitters of Israelis," *New York Times*, December 11, 2001.
9. Hoffman, *Inside Terrorism*.
10. "Operations Against Hizbollah Organization—an Arsenal Found in Medin," Anadolu Agency, January 29, 2000 (www.hri.org/news/turkey/anadolu/2000/00-01-29.anadolu.html, accessed February 3, 2000).

11. "Turkish Paper Lists Seized Gazientep Arms," *Istanbul Hurriyet* (Ankara edition) in Turkish, February 11, 2000, FBIS document I.D. FTS20000212000110.
12. "Preparation for CB Attack Viewed," *The Jerusalem Report*.
13. "Refugee Calls for Biological Weapons Against the West," *Metro* (London), September 6, 1999.
14. W. Seth Carus, "Bioterrorism and Biocrimes: The Illicit Use of Biological Agents in the 20th Century," Center for Counterproliferation Research, National Defense University, August 1998.
15. "Iran-Backed Group Says Sharon 'Holy War' Is Forever," *World Tribune* (www.worldtribune.com/worldtribune/Archive-2001/me-mideast-02-12.html).
16. U.S. Department of State. "Overview of State-Sponsored Terrorism," *Patterns of Global Terrorism 2000*, Office of the Coordinator for Counterterrorism, April 2001 (www.state.gov/s/ct/rls/pqtrpt/2000).
17. Boaz Ganor, "Countering State-Sponsored Terrorism," International Policy Institute for Counterterrorism (www.ict.org.il/articles/articleDet.cfm?articleid=5#Conflicts), p. 4.
18. State Department, "Overview of State-Sponsored Terrorism."
19. Ray Takeyh, "The Rogue Who Came in From the Cold," *Foreign Affairs*, May/June 2001, p. 4.
20. In August 2001, Iraqi Foreign Minister Naji Sabri praised a suicide bomb attack by Islamic Jihad, stating that "the Jihad (holy war) is the only path for the liberation of Palestine." "Iraq Praises Haifa Suicide Bomb Attack," Agence France Presse, August 12, 2001.
21. "Israel Says bin Laden Sets Up Terrorist Network in Territories," Xinhua News Agency, April 24, 2001.
22. Timothy V. McCarthy and Jonathan B. Tucker, "Saddam's Toxic Arsenal," in Peter R. Lavoy et al. eds., *Planning the Unthinkable: How New Powers Will Use Nuclear, Biological, and Chemical Weapons* (Ithaca: Cornell University Press, 2000), p. 76.
23. In a survey conducted in January 2002 by the Jerusalem Media and Communications Centre, 64 percent of the Palestinians polled supported suicide operations, a dramatic increase from the 24 percent who said they approved in a May 1997 survey (www.jmcc.org/publicpoll/pop/02/jan/pop7.htm).