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About the CTC Sentinel

The Combating Terrorism Center is an independent educational and research institution based in the Department of Social Sciences at the United States Military Academy, West Point. The CTC Sentinel harnesses the Center's global network of scholars and practitioners to understand and confront contemporary threats posed by terrorism and other forms of political violence.

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Attacks in the Suez: Security of the Canal at Risk?

By Stephen Starr



Egyptians watch a tanker ship sail through the Suez Canal near the port city of Ismailia. - Photo by STRINGER/AFP/Getty Images

EGYPT'S SUEZ CANAL is one of the world's busiest petroleum shipping channels.¹ An estimated 2.2 million barrels of oil and liquefied natural gas (LNG) from the Persian Gulf pass through the Suez Canal every day bound for markets in Europe and North America.² In addition, more than 1,500 container ships, headed to Europe and Asia, traversed the canal in the second quarter of 2013.³

With Egypt mired in political instability, however, a terrorist group sharing al-Qa`ida's ideology—the Furqan Brigades—attacked vessels traversing the canal in 2013, and have

vowed to conduct similar attacks in the future.⁴ In the wake of these attacks, there is concern that militants could successfully disrupt shipments through the Suez Canal, such as by sinking a large vessel and blocking the canal for a period of time.

This article provides background on the Suez Canal, discusses the emerging terrorist threat to vessels using the 120-mile waterway, warns of growing unrest in the Sinai Peninsula, and identifies some of the challenges faced by shipping companies in the Suez region. It finds that while security in the bordering Sinai Peninsula remains transient and the Egyptian state appears unable to stamp out militant activity in the Sinai, terrorist groups would have to employ

1 "World Oil Transit Chokepoints," U.S. Energy Information Administration, August 22, 2012.

2 Ibid.

3 "Decline in Suez Canal Container Ship Transits Slows," *Journal of Commerce*, August 5, 2013.

4 "Group Behind Cosco Asia Attack Promise More Suez Strikes," *GulfShip News*, September 6, 2013.

new tactics to sink vessels if their goal was to block the canal for any period of time. Yet such tactics are not beyond their reach, and previous incidents of maritime terrorism could serve as their guide.

Background

Linking the Red and Mediterranean Seas, 7% of the world's oil and 12% of global LNG traffic pass through the Suez Canal, making it vital to the world energy trade.⁵ It has been closed only five times in its 144-year history.⁶ It is maintained and owned by the Suez Canal Authority, which is in turn operated by the Egyptian government.⁷ The canal generates around \$5 billion per year for Egypt and is an important source of foreign currency due to an ailing tourism trade.⁸

In 2012, 17,225 vessels passed through the canal coming from the Mediterranean Sea in the north and the Gulf of Suez in the south, often with just minutes of headway between each ship.⁹ Shipping companies using the Suez waterway include Maersk Line, COSCO, Hapag-Lloyd and the French-owned CMA CGM. For North American markets, the Suez is used by container vessels departing Houston, Charleston, Norfolk, and Newark bound for, among other countries, the United Arab Emirates, India and Pakistan.¹⁰

Moreover, in April 2013, the world's biggest shipping company, Maersk Line, replaced the Panama Canal with the Suez route for its Asia-East Coast America shipping as a result of increasing toll charges at Panama and the deployment of 18,000 20-foot equivalent unit (TEU) vessels, further increasing the importance of the Suez route to international trade.¹¹

5 "World Oil Transit Chokepoints."

6 See "Canal History," Suez Canal Authority, undated.

7 "The Suez Canal: A Vital Shortcut for Global Commerce," World Shipping Council, undated.

8 "Islamist Militants Claim Responsibility for Suez Canal Attack," Ahrum Online, September 5, 2013.

9 "Suez Canal Traffic Stats," Suez Canal Authority, undated.

10 See "MECL1 - Eastbound," Maersk Line, undated; "MECL2 - Eastbound," Maersk Line, undated.

11 Even when the Panama Canal opens its new, bigger locks next year, it will still be unable to service 18,000 TEU container ships. See Kyunghye Park, "Maersk Line to Dump Panama Canal for Suez as Ships Get Bigger," Bloomberg, March 11, 2013. The canal is also essential for

Threat to the Canal: The Furqan Brigades

The security of the Suez Canal was threatened on July 29 and August 31, 2013, when militants attacked two ships in the waterway with rocket-propelled grenades (RPG). In both instances, there was only slight damage to the vessels. The Furqan Brigades, a group based out of Egypt's Sinai Peninsula, claimed credit for the attacks.¹² The Furqan Brigades, which support al-Qa`ida's ideology but may not be directly linked to the terrorist group,¹³ promised further attacks on maritime traffic, saying that

“Securing the Suez Canal is problematic. Locals keep small fishing boats along the waterway and its lakes, while numerous towns, villages and farms dot its western shoreline.”

the canal is an important trade route and has also “become the safe way for the Crusader aircraft carriers to cross in to assault Muslims.”¹⁴ Little is known about the Furqan Brigades' leadership, and it only rose to prominence when the two attacks in the Suez Canal were made public.¹⁵ It may number less than a few dozen militants, although it has now claimed responsibility for a handful of attacks in Egypt.

Details about the July 29 attack are limited, but a video purportedly released by the group showed a Furqan Brigades militant launching what appeared to be a rocket at a ship, under the cover of darkness.¹⁶ Egyptian authorities played

U.S. Navy vessels. See "US Naval Convoy Crosses Egypt's Suez Canal," al-Jazeera, November 8, 2013.

12 "Islamist Militants Claim Responsibility for Suez Canal Attack." Video of the first attack is available at www.youtube.com/watch?feature=player_embedded&v=TaI-JXR18N4.

13 Jamie Dettmer, "Egypt's Newest Jihadists: The Jamal Network," *Daily Beast*, November 1, 2013.

14 Ibid. Lee Ferran, "Video Shows Rocket Attack on Suez Canal Ship, Group Says," ABC, September 6, 2013.

15 See, for example, the video they released of the August 31 attack, available at www.youtube.com/watch?v=buS4mfEX3w0.

16 "Egyptian Army Says No Sign of Blast Near Suez Canal, Shipping as Normal," Reuters, July 30, 2013.

down the significance of the July 29 incident,¹⁷ but maritime experts said that the speed with which the Suez Canal Authority apportioned blame to "terrorists" for the second attack on August 31 suggested they had prior knowledge that the two incidents were connected.¹⁸

In the second attack on August 31, a video released by the Furqan Brigades showed two men moving toward a ship, the COSCO Asia, before each fired an RPG into the port (left) hull of the vessel in broad daylight.¹⁹

A statement released by the Furqan Brigades in September said,

After becoming fed up with criminal practices such as sieges of mosques, killing and displacement of Muslims, detentions of Muslim scholars, and the vicious attack by Egypt's Crusaders on Islam and its people and mosques, the Furqan Brigades declare their responsibility for targeting the international waterway of the Suez Canal which is the artery of the commerce of the nations of disbelief and tyranny. By the graces of God, it was carried out with two RPG rounds [on August 31] amid their weak guards.²⁰

The language employed by the group in its statements is typical of al-Qa`ida-linked, anti-Western extremist groups. "We know they aren't suicide martyrs, we know they are technologically savvy, and we know they have the capability as they proved it twice," said Kevin Doherty, president of Nexus Consulting, a security firm that monitors maritime threats. "They seem to be a more sophisticated group and yet are keeping a very low profile and WWW [internet] footprint."²¹ Egyptian authorities said they arrested three people on September 1 who, according to an army source, opened fired on the COSCO Asia vessel

17 "Ship Attack Foiled in Suez Canal," al-Jazeera, September 1, 2013.

18 Personal interview, Kevin Doherty, president of Nexus Consulting, December 2013.

19 Video of this attack is available at www.youtube.com/watch?v=buS4mfEX3w0.

20 This letter can be accessed at www.ncga.us/assets/First_Letter_AF.jpg.

21 Ibid.

with “machine guns,” even though video released by the group clearly showed an attack with rockets.²²

More recently, the Furqan Brigades claimed responsibility for an attack on a satellite communications facility in Maadi, Cairo, in October 2013.²³ In that attack, video showed several militants, under the cover of darkness, launching an RPG at the facility.²⁴ The explosion reportedly caused a one meter hole in one of the satellite dishes.²⁵ The group has also claimed responsibility for a number of assassinations targeting Egyptian military personnel.²⁶

Growing Unrest in the Sinai Peninsula and Suez Region

The Furqan Brigades are not the only threat to the stability of shipping in the Suez Canal. The canal divides Egypt proper from the 23,000-square-mile Sinai Peninsula. Bordering the Gaza Strip, the peninsula’s northern areas have for years been home to militant activity, chiefly involving Palestinian smugglers and militants attempting to move goods and weapons into the Gaza Strip. Since this activity primarily targets Israel and not Egypt, and because of the wider political turmoil in Egypt, the state’s security forces have concentrated resources elsewhere, which has allowed militant groups such as the Furqan Brigades to grow and prosper.

In August 2012, the Egyptian military launched a massive operation in the Sinai following the killing of 15 Egyptian border guards on the Sinai-Israeli border.²⁷ Egyptian forces deployed troops, tanks and warplanes, the latter for the first time in the Sinai since the 1973 Arab-Israeli war. The

following summer, in 2013, Egypt moved two infantry battalions to the Sinai to battle militants.²⁸ Throughout September and the following months, Egyptian authorities conducted more operations.²⁹ The aggressive operations left homes and villages in rubble,³⁰ and the Egyptian military said it captured hundreds of militants, including Palestinians.³¹

Despite the Egyptian security operations, militants have since carried out several attacks in the Sinai. On October 7, 2013, unidentified militants attacked a government army convoy close to the Suez Canal, killing six

“A waterborne suicide bomb attack on an LNG tanker or cruise ship transiting the Suez Canal—a tactic used against the USS Cole in 2000—would have immediate effects on the use of the Suez as a major shipping route.”

soldiers.³² The same day, a suicide bomber drove a vehicle into a security building in the Sinai Peninsula.³³ In addition to the Furqan Brigades, other terrorist groups are operating in the area, including Ansar Bayt al-Maqdis. This group, which has claimed responsibility for a number of attacks on Egyptian security forces in the Sinai, is thought to comprise local Bedouins as well as some foreign fighters.³⁴

28 Avi Issacharoff and Ricky Ben-David, “Israel Allows Two More Egyptian Battalions into Sinai,” *Times of Israel*, July 15, 2013.

29 David Kirkpatrick, “Egypt Reports Gains Against Militants in Sinai,” *New York Times*, September 15, 2013.

30 Richard Spencer, “Suez Canal Targeted as War in Sinai Spreads,” *Sunday Telegraph*, November 17, 2013.

31 “Egypt Army Claims Progress in Sinai Campaign,” al-Jazeera, September, 15, 2013.

32 Abigail Hauslohner, “Bomb Hits Egypt’s Sinai, Soldiers Ambushed a Day after Deadly Clashes in Capital,” *Washington Post*, October 7, 2013.

33 Ibid.

34 Abigail Hauslohner and Erin Cunningham, “In Egypt,

The civil and political unrest that has rocked Egypt since the ousting of President Hosni Mubarak in February 2011 has affected every major population center. In Suez, a port city of 500,000 people situated at the southern mouth of the canal in Egypt proper, civil unrest has erupted sporadically over the past three years. In July, street fighting between pro- and anti-Muslim Brotherhood groups resulted in injuries to more than 100 people.³⁵

Elsewhere in the Suez region, police found explosives planted on a railway line in September 2013,³⁶ while fighting following the fallout of the Port Said stadium killings in 2012,³⁷ in which more than 70 died, has added to a sense of instability and drawn the army to the area.³⁸

Problems for Shipping Companies

The threat of terrorist attacks and the growing unrest in the Sinai Peninsula have raised obvious concerns about the stability of shipments through the Suez Canal. According to the U.S. Energy Information Administration, closure of the Suez Canal “would add an estimated 2,700 miles of transit from Saudi Arabia to the United States around the Cape of Good Hope via tanker.”³⁹ Nevertheless, major shipping companies do not, at least publicly, appear overly worried about the threat of further attacks. Mikkel Elbek Linnet of Maersk Line, for example, said the company was not planning to alter future plans because of emanating threats.⁴⁰

Jihadist Group Bayt al-Maqdis Claims Responsibility for Bombing,” *Washington Post*, October 21, 2013; David D. Kirkpatrick and Mayy el Sheikh, “Video Offered to Back Claim of Cairo Attack,” *New York Times*, October 27, 2013.

35 “112 Wounded in Bloody Violence in Egypt’s Suez,” *Ahram Online*, July 22, 2013.

36 “Egypt’s Army Finds Explosives on Rail Line Near Suez,” *Reuters*, September 7, 2013.

37 Mohamed Fadel Fahmy and Ian Lee, “Anger Flares in Egypt After 79 Die in Soccer Riot,” *CNN*, February 2, 2012.

38 “Egypt Protesters Torch Buildings, Target Suez Canal,” *Reuters*, September 3, 2013.

39 “World Oil Transit Chokepoints.”

40 Personal interview, Mikkel Elbek Linnet, group press officer at Maersk Line, November 2013.

22 Asma al-Sharif, “Egypt Arrests Three After Gun Attack on Ship in Suez Canal,” *Reuters*, September 1, 2013.

23 David Barnett, “Al Furqan Brigades Claim Attack on Satellite Station in Cairo,” *The Long War Journal*, October 8, 2013.

24 Video of this attack is available at www.youtube.com/watch?v=IXhYAU9xyd4#t=111.

25 “Al-Forqan Brigades Claims Responsibility for the Maadi Satellite Station Attack,” *al-Masry al-Youm*, October 8, 2013.

26 David Barnett, “Al Furqan Brigades Claims Responsibility for Recent Shooting Attacks in Egypt,” *The Long War Journal*, November 30, 2013.

27 Harriet Sherwood, “Egypt-Israel Border Attack Leaves Over a Dozen Dead,” *Guardian*, August 6, 2012.

Some experts argue that RPG attacks are unlikely to sink a major vessel and thus close the canal,⁴¹ and that only an attack launched by an explosives-laden smaller boat could achieve that outcome.⁴² The fact that the Furqan Brigades have not yet succeeded in carrying out bombings on board ships, nor have resorted to suicide attacks on vessels, suggests that, at least as a new

“The military appears increasingly incapable of preventing the sporadic attacks such as those being launched by the Furqan Brigades and Ansar Bayt al-Maqdis.”

organization, such capabilities may not yet exist.⁴³ Analysts, however, believe that the Furqan Brigades could gain the skills necessary to launch waterborne attacks on cargo vessels if they should choose to do so.⁴⁴ There are a number of groups operating in the Sinai with proven bomb-making experience that share the same ideological outlook as the Furqan Brigades, and cross training between groups is a possibility.⁴⁵

The Furqan Brigades are not the first group to plot attacks on ships transiting the Suez Canal. In July 2009, Egyptian authorities said that they arrested 25 militants with suspected links to al-Qa`ida for plotting to use explosives fitted with mobile phone-activated detonators against ships in the canal.⁴⁶ Other plots have been foiled as well.⁴⁷

Securing the Suez Canal is problematic. Locals keep small fishing boats along the waterway and its lakes, while numerous towns, villages and farms dot

its western shoreline.⁴⁸ In March 2008, a ship contracted to the U.S. Navy fired at a group of boats in the canal, killing one man, after the latter failed to heed warnings from the Navy vessel to keep the required distance.⁴⁹

According to one expert, there are numerous points along the canal where security is absent or lacking:

There are ferries that go east to west, locations where people sit along and watch the ships go by, there are bridges that overpass the canal of which things can be dropped from or people can gain access from, even fishermen and sales folks selling DVDs and such inside the canal waterways.⁵⁰

In the case of the Furqan Brigades' attack on the COSCO Asia container ship on August 31, the militants reportedly fired at the ship in an area where dense shrubs divided the road from the canal, obscuring the jihadists from view of the authorities or other observers.⁵¹

An attack on any large transport vessel that resulted in its sinking would “effectively shut the entire canal” for days, even weeks.⁵² Even if militants failed to sink a major vessel, a waterborne suicide bomb attack on an LNG or oil tanker, or cruise or container ship transiting the Suez Canal—a tactic used against the *USS Cole* in 2000 and the *M/V M. Star* in 2010—would have immediate effects on the use of the Suez as a major shipping route.

Conclusion

Egypt's military recognizes the threat it faces over securing the Suez Canal, although it has not done enough to mitigate the risk of attacks, instead favoring reactive military campaigns against militant groups and individuals operating from the Sinai Peninsula. Yet the threat of serious attacks by militants—operations that could sink a major vessel and thus block the canal—is a real one.⁵³

The military, a cornerstone of the Egyptian state, has been on the wane in recent years as popular protests increasingly dominate the political sphere.⁵⁴ Furthermore, the loyalty of the security forces and police was called into question in Port Said early in 2013 when police took part in strikes and protests after being blamed for crackdowns on demonstrators.⁵⁵ The military appears increasingly incapable of preventing the sporadic attacks such as those being launched by the Furqan Brigades and Ansar Bayt al-Maqdis. As a result, the Sinai Peninsula remains a hotbed of militant activity, and ships in the Suez Canal risk future attacks.

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41 Personal interview, Charles Lister, IHS Jane's researcher, October 2013.

42 Ibid.

43 Ibid.

44 Personal interview, Kevin Doherty, president of Nex-us Consulting, December 2013.

45 For example, Ansar Bayt al-Maqdis.

46 “Egypt Arrests 25 in ‘Suez Plot,’” BBC, July 9, 2009.

47 See, for example, “National Security Agency Foils Alleged Attack on Suez Canal,” Middle East News Agency, March 21, 2012.

48 A 2009 Maersk container vessel's voyage through the canal provides a partial, if useful, view of the waterway and surrounding areas. See www.youtube.com/watch?v=DU4zbMOqapQ.

49 “US Admits to Suez Canal Killing,” BBC, March 26, 2008.

50 Personal interview, Kevin Doherty, president of Nex-us Consulting, January 2014.

51 According to the *Telegraph*, “The Canal-side lane of the road has now been closed to traffic there and security stepped up.” For details, see Richard Spencer, “Suez Canal Targeted as War in Sinai Spreads,” *Telegraph*, November 17, 2013.

52 Christian Le-Miere, “Suez Attack Highlights Risks to Shipping,” International Institute for Strategic Studies, September 6, 2013.

53 Ibid.

54 Michael Nayebi-Oskoui, “The Weakening of Egypt's Military State,” *Forbes*, July 9, 2013.

55 Maggie Michael, “Police Strikes in Egypt Accelerate, Adding Turmoil,” Associated Press, March 8, 2013.

Jamaican Organized Crime After The Fall of Dudas Coke

By Ioan Grillo

ENTERING THE TIVOLI GARDENS ghetto in West Kingston, scars of the battle to arrest Jamaica's most infamous criminal kingpin, Christopher "Dudas" Coke, in May 2010 are everywhere.¹ Blocks of apartments remain riddled with bullet holes, where soldiers and police battled with Coke's gunmen. Some streets are still blocked by the makeshift barricades of concrete and uprooted street lamps, which Coke's supporters used to slow security forces. The nearby graveyard contains dozens of tombs of people who died in the violence.²

Coke's reign has left even deeper marks on many young men from the area. An entire generation of drug traffickers and paid assassins grew up under Coke, who was both the "don" of Tivoli and head of the international Shower Posse from 1992 until his extradition to the United States in 2010. Many still refer to Coke, also known as "The President," in near-messianic terms and reminisce about his leadership.³ They also apply the criminal skills they learned under Coke to keep moving drugs to the United States and guns back to their homeland.

This article examines how Jamaican organized crime has reshaped after the so-called "Dudas affair," which shook Jamaica's political system as one of the country's bloodiest confrontations since its 1962 independence. It looks at how Jamaican politicians, seeing

the threat Coke posed, have tried to back away from their long-standing relationship with gang leaders. It finds that Coke's fall has left a power vacuum within Jamaican ghettos that other contenders are trying to fill. Jamaican traffickers from the Shower Posse and other gangs have morphed into more fragmented groups to stay off the radar of law enforcement. These smaller cells have been effective at trafficking cocaine, helping the Caribbean regain its foothold as a major smuggling corridor from Colombia to the United States.

Dons to Traffickers

When Jamaica gained its independence from the United Kingdom in 1962, the nation's politicians inherited a country with vast chasms between the wealthy, often descended from plantation owners, and poor, mostly descended from slaves. Many of the poor flocked to growing urban ghettos, especially in Kingston, which often lacked basic sanitation and paved streets. Area leaders, or strongmen, emerged in these ghettos, becoming known as "dons" in the 1970s. The two major political parties, the Jamaica Labor Party (JLP) and People's National Party (PNP), both financed these dons to deliver votes for them in return for money and development projects.⁴ The dons' turfs became known as garrisons because of the way they were defended like forts with many blockaded entrances. Dons from JLP garrisons fought their rivals from PNP garrisons, unleashing intense political violence. This violence reached a peak in the election year of 1980, when there were 889 murders.⁵

Tivoli Gardens in West Kingston was emblematic of this partisan system, being dubbed the "mother of all garrisons" by a head of the Jamaica Defence Force.⁶ It elected JLP officials consistently for four decades, while images of Tivoli's dons and their "soldiers" were painted in murals on its streets.⁷ Dons also

controlled turfs across poor areas of Kingston, Spanish Town, Montego Bay and other parishes.⁸

While this political violence raged in Jamaica, many of the country's criminals went to the United States, building networks to traffic marijuana and cocaine for Americans and guns back to their homeland. Around 1980, traffickers from Tivoli Gardens and some allied garrisons formed the Shower Posse in New York.⁹ A veteran member described in an interview how the name derived from their reputation for showering their enemies with gunfire.¹⁰ "We wanted to stand out among other gangs that were already established in the United States, to earn our reputation, to make people on the street respect us," said the member in an interview in Kingston.¹¹ Jamaicans from rival PNP garrisons followed by creating the Spangler Posse.¹²

The Shower Posse's U.S. operations were headed by Vivian Blake, while in Jamaica it was controlled by Lester Lloyd Coke (also known as Jim Brown), the don of Tivoli Gardens.¹³ The Shower Posse spread rapidly across the United States, building a stronghold in Miami and expanding to cities including Los Angeles, Kansas City and Chicago, helping drive the crack cocaine epidemic.¹⁴ It also had connections as far afield as London.¹⁵ It defended its operations with intense violence. In the 1980s and early 1990s, the Posse was blamed for more than 1,000 murders in the United States.¹⁶

Slums," Associated Press, October 17, 2013.

8 Sives, pp. 146-150.

9 Liz Robbins, "Vivian Blake, 54, Founder of Jamaica Drug Gang, Dies," *New York Times*, March 25, 2010.

10 Personal interview, Shower Posse member, Kingston, Jamaica, November 5, 2013.

11 Ibid.

12 The Spangler Posse takes its name from the unofficial label of a part of Kingston known as the Spangler's community, encompassing the PNP stronghold of Matthews Lane.

13 "Senate Report on Non Traditional Organized Crime," U.S. General Accounting Office, September 29, 1989, p. 26. Also see John Holland, "Reputed Gang Chief to Admit Crimes," *Sun Sentinel*, February 23, 2000.

14 Ibid.

15 Jon Silverman, "Jamaica Violence Linked to U.S. Drug Market," BBC, May 27, 2010.

16 The figure of 1,400 murders in the United States attributed to the Shower Posse is often cited, as in Liz Rob-

1 Personal observations, Tivoli Gardens, Kingston, Jamaica, November 4-8, 2013.

2 More than 70 civilians, a soldier and two police officers were killed during three days. See Mattathias Schwartz, "A Massacre in Jamaica," *New Yorker*, December 12, 2011, which quoted the oft cited police figure of 73 civilians. The incursion into Tivoli Gardens and the death toll was examined by Jamaica's Office of the Public Defender in an Interim Report to Parliament, dated April 29, 2013.

3 Personal interviews, Tivoli Garden residents, Kingston, Jamaica, November 4-8, 2013. An example of the messianic support for Coke was in placards held during the 2010 incursion that said, "Jesus died for us, we will die for Dudas." For details, see Gary Spaulding, "The Sacrifice: Souls Lost for the 'Cause,'" *Jamaica Gleaner*, May 30, 2010.

4 Amanda Sives, *Elections, Violence and the Democratic Process in Jamaica* (Kingston: Ian Randle Publishers, 2010) gave a detailed look at political violence following independence. The violence is also detailed in the Jamaican parliamentary document, titled "Report of the National Committee on Political Tribalism," July 23, 1997.

5 Sives, p. 118.

6 Erica Virtue, "Army Chief Says Tivoli Mother of All Garrisons," *Jamaica Observer*, October 8, 2005.

7 David McFadden, "Police Erasing Gang Murals in

The Reign of Dudus

Christopher “Dudus” Coke took control of Tivoli Gardens and the Shower Posse following the death of his father Lester Lloyd Coke in 1992.¹⁷ According to U.S. prosecutors, Coke masterminded the trafficking of tons of marijuana and cocaine over almost two decades until his 2010 arrest.¹⁸ A main base of his U.S. operations was in the Bronx, but he also built a significant network in Toronto, Canada.¹⁹

The Shower Posse under Dudus Coke, however, appeared to commit much less violence on the streets of the United States than in the 1980s. Several sources said that Dudus preferred business to war and tried not to provoke a U.S. law enforcement reaction. “He was a little more business savvy than your typical criminal,” said Jamaica’s National Security Minister Peter Bunting. “He had gone to a well thought of high school, he had up-to-date camera systems and technology around his organization.”²⁰

It took U.S. prosecutors until 2009 to indict Coke, even though they cited crimes as far back as 1994.²¹ They finally accused him of cocaine, marijuana and firearms trafficking but could not directly link him to any murders in the United States.

While the streets of New York became less murderous during Coke’s reign, Jamaica became increasingly violent;

it reached a rate of 62.5 homicides per 100,000 in 2005, one of the highest in the world.²² Gunmen from Tivoli Gardens were accused of many of these killings, especially against rival garrisons. Yet the don of Tivoli, Coke himself, was operating openly and even headed two front companies, Presidential Click and Incomparable Enterprises.²³

Coke bolstered his public image by carrying out Robin Hood style charity work in Tivoli and allied garrisons. His operatives would hand out schoolbooks and stationary to children in public events before the term started.²⁴ He also ran free bi-annual concerts with some of Jamaica’s top reggae artists. In turn, many singers, including Bob Marley’s step-brother Bunny Wailer, recorded tracks praising Coke, helping build a personality cult bigger than any previous Jamaican criminal.²⁵

Coke also won support by punishing so-called anti-social crimes, such as rape and theft, in the communities he controlled. In an interview with the author, a Shower Posse operative described overseeing enforcers carrying out a public beating of rapists under orders from Coke.²⁶ While police would rarely venture into Tivoli, many residents claimed the area was fairly safe. “He had this almost republic like status as the overlap of the criminal gang with the control of a geographic area, plus strong political connections,” said Security Minister Bunting.²⁷

In 2007, Prime Minister Bruce Golding returned the JLP to power, while representing the very constituency that included Tivoli. In 2009, the United States indicted Coke and issued an extradition order for him. Golding refused to accept it, saying it included

information from unauthorized wiretaps on Coke’s phone.²⁸

Golding’s refusal to arrest and extradite Coke sparked outrage from Jamaica’s opposition politicians and condemnation from U.S. officials. After months of pressure, Golding finally capitulated and an arrest warrant was issued in May 2010. Gunmen loyal to Coke reacted by attacking police stations, which provoked a state of emergency and the mobilization of the army as well as police. The number of garrisons that rose up revealed how Coke’s influence extended beyond his core base in Tivoli.

During the unrest, Jamaica’s security forces were accused of widespread human rights abuses, including shooting unarmed civilians.²⁹ Nevertheless, they effectively took control of the garrisons from Coke’s gunmen and arrested more than 500 alleged criminals, who they kept temporarily in a national sports stadium.³⁰ Coke himself escaped from the initial incursion, but was arrested several weeks later, disguised as a woman and accompanied by a reverend. Coke said he was heading to the U.S. Embassy to turn himself in, fearing he could be assassinated by Jamaican security forces.³¹

The End of Don Man Politics?

The Dudus affair showed how the dons and garrisons originally fortified by Jamaica’s politicians had surpassed their control and now threatened the state itself. Golding was widely criticized for defending a drug trafficker from his constituency and his party lost the 2011 elections to the PNP. Politicians from both parties now try to distance themselves from the dons and other gangsters.

bins, “Vivian Blake, 54, Founder of Jamaica Drug Gang, Dies,” *New York Times*, March 25, 2010.

17 This was confirmed in personal interview, Jamaica’s National Security Minister Peter Bunting, Kingston, Jamaica, November 13, 2013. The date is also cited in K.C. Samuels, *Jamaica’s First President, Dudus 1992 – 2010* (Kingston: PageTurnER Publishing House, 2011).

18 The indictment is from the Southern District of New York, S15 07 Cr. 971. Marijuana was grown in the Jamaican countryside and smuggled on small boats, or from cargo ships that docked in the Tivoli Gardens docks, to Florida, where it was trafficked to other parts of the United States. Cocaine was brought by boats from Jamaica and smuggled into the United States using the same route as marijuana.

19 Denise Balkisson, “Deadly Shower Posse Gang Has Deep Ties to Toronto,” *Toronto Star*, May 25, 2010.

20 Personal interview, Jamaica’s National Security Minister Peter Bunting, Kingston, Jamaica, November 13, 2013.

21 Indictment from the Southern District of New York, S15 07 Cr. 971.

22 From the United Nations Office on Drugs and Crime (UNODC) Homicide Statistics.

23 Gary Spaulding, “Heat on Dudus Pals,” *Jamaica Gleaner*, June 13, 2012.

24 Personal interviews, Tivoli Garden residents, Kingston, Jamaica, November 4-8, 2013.

25 Patricia Meschino, “Jamaican Musicians Rally to Support Alleged Drug Kingpin ‘Dudus’ Coke,” *Billboard*, June 18, 2010.

26 Personal interview, Shower Posse member, Kingston, Jamaica, November 5, 2013.

27 Personal interview, Jamaica’s National Security Minister Peter Bunting, Kingston, Jamaica, November 13, 2013.

28 Devon Dick, “Obama Vs Golding: Jamaica Loses,” *Jamaica Gleaner*, March 11, 2010.

29 Personal interview, Carolyn Gomes, executive director of Jamaicans for Justice, November 12, 2013. The extrajudicial killings are also examined by Jamaica’s Office of the Public Defender in an interim report to parliament dated April 29, 2013.

30 “Dozens Dead, More Than 500 in Custody,” CNN, May 26, 2010.

31 Karyl Walker and Kimmo Matthews, “Dudus Captured,” *Jamaica Observer*, June 23, 2010.

While there has been a real change in dialogue, more progress is needed to sever contacts between Jamaica's politicians and the dons. The JLP's opposition spokesman on justice, Delroy Chuck, conceded that more work is necessary to break the habit of many politicians using area dons to return votes for them. "Many politicians stayed in power for decades because of the don system so they had no incentive to change it," Chuck said. "It is hard to break that umbilical cord."³²

The Coke episode, however, also showed Jamaican criminal groups how the high profile of an area don has disadvantages. As a Manhattan federal court in 2012 sentenced Coke to 23 years in prison, traffickers could see how Coke's personality cult had put him on the radar of U.S. authorities. In reaction, many traffickers in Jamaica are now operating in smaller networks, more independent of dons and trying to maintain a low profile. "You often see the same people who worked with the Shower for years but now they are want to hide that connection to beat the conspiracy charges," said a Shower Posse operative.³³

One example of these more fragmented trafficking groups was exposed in arrests made by U.S. agents in October 2013. In a probe dubbed Operation Next Day Air that involved 10 U.S. agencies including the Drug Enforcement Administration, nine people were arrested in a trafficking ring that stretched from Jamaica to New Jersey to California.³⁴ While the suspects had links to the garrisons of West Kingston, they were not immediately linked to a particular posse or don.

These more fragmented groups have been effective at moving substantial quantities of cocaine through the Caribbean, helping to revitalize it as an important smuggling corridor. The DEA reported that 87 tons of cocaine were seized in the Caribbean in 2012 (almost double that of 2011) and another 44 tons

in the first half of 2013.³⁵ Caribbean seizures now account for 14% of U.S.-bound cocaine.³⁶ This shift follows the build-up of more security on the U.S. southern border and years of sky-high rates of drug related violence in Mexico. Cocaine seizures are also being made in Puerto Rico and the Dominican Republic as well as Jamaica.

Tropical Paradise

The unrest around Dudus Coke sparked scenes of violence that threatened Jamaica's image as a tropical paradise visited by two million people a year. Tourism, however, only fell 2.4% in the months directly after the unrest and has been growing since.³⁷ The vast majority of Jamaica's homicides take place in the garrisons, away from tourist areas. Nevertheless, gangs from these garrisons continue to sell drugs and pimp prostitutes in tourist areas, including Montego Bay.³⁸

Jamaica's image was also helped by a decline in the murder rate immediately following Coke's arrest. The number of homicides dropped 34% from 1,683 in 2009, the year before he was detained, to 1,113 in 2011, the year after.³⁹ The most common explanation for the decline is the mass arrest of alleged gunmen during the state of the emergency. The trend has begun to rise again, however, with about 1,200 murders in 2013.⁴⁰

Some of these recent killings have taken place in Tivoli and nearby garrisons by gangsters fighting to establish themselves as the new area leader. Since Coke was detained, no single figure has become the new don in his place, and there are at least four groups fighting for power in Tivoli.⁴¹ Some residents reminisce the days of a single strongman

and hope another will take Coke's place. "Dudus may have done some bad things but he kept order," said market trader Romino Wilkins. "Now you don't know who these bad men on the street are and they are out of control."⁴²

Conclusion

Following the "Dudus affair," Jamaican traffickers have splintered into smaller groups to avoid detection and conspiracy charges. These groups have been effective at smuggling, and the Caribbean has become more important as a corridor for cocaine heading to the United States. The loss of Coke, however, has left a power vacuum in certain Jamaican ghettos. A new strongman may arise to fill this space unless the fundamental causes of crime and violence in these areas are resolved.

The unrest in Jamaica around the arrest of Coke also showed how criminal gunmen can unleash violence that surpasses public security to become a national security issue, threatening the state itself as it has in other countries including Mexico. Jamaican politicians appear to have learned from this confrontation and backed away from their historic links to criminal gangs in the last three years. Nevertheless, these links have deep roots, and it remains to be seen whether Jamaican politicians avoid turning back to gang leaders to deliver them votes in the future.

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32 Personal interview, Jamaican Member of Parliament Delroy Chuck, Kingston, Jamaica, November 11, 2013.

33 Personal interview, Shower Posse member, Kingston, Jamaica, November 5, 2013.

34 Christopher Baxter, "N.J. State Police Dismantle Jamaican-Based Cocaine Shipping Ring," *Star Ledger*, October 17, 2013.

35 Danica Coto and David McFadden, "Caribbean Drug Trafficking on the Rise," Associated Press, October 4, 2013.

36 Ibid.

37 Camilo Thame, "Dudus Cost to Jamaica's Tourism Revealed," *Jamaica Observer*, August 25, 2010.

38 Personal interviews, gang members in Montego Bay, Montego Bay, Jamaica, November 14, 2013.

39 Numbers from the United Nations Office on Drugs and Crime (UNODC) Homicide Statistics.

40 Karyl Walker, "2013 Bloodier than 2012," *Jamaica Observer*, January 1, 2014.

41 Personal interview, Jamaica's National Security Minister Peter Bunting, Kingston, Jamaica, November 13, 2013.

42 Personal interview, Tivoli resident Romino Wilkins, Kingston, Jamaica, November 5, 2013.

The Biohacker: A Threat to National Security

By Stephen Hummel, Vito Quaranta, and John Wikswo

BIOLOGICAL WARFARE HAS existed for centuries, with one of the earliest known examples occurring in 1155 when Emperor Frederick Barbarossa poisoned water wells with human bodies in the siege of Tortona, Italy.¹ In 1972, the Convention on the Prohibition of the Development, Production, and Stockpiling of Bacteriological (Biological) and Toxin Weapons and their Destruction was signed and adopted by the United Nations Office for Disarmament Affairs for enforcement.² The treaty aims to prevent the development of offensive³ biological weapon (BW) agents and eliminate existing stockpiles; however, it only applies to the 170 nation-states that signed the convention and does not affect the actions of the 23 non-signatory states, such as Chad, Israel and Kazakhstan,⁴ or independent groups and individuals that seek to employ such weapons.

The 2001 anthrax letters in the United States demonstrated that the 1972 BW convention limits only one aspect of the problem. Weapons of mass destruction (WMD), once previously under the sole control of nation-states, now could be maintained and deployed by an individual.⁵ In 2010, it was concluded that these letters, which were mailed to political leaders and media outlets across the United States, constituted a terrorist attack⁶ and were sent by Dr.

1 Friedrich Frischknecht, "The History of Biological Warfare: Human Experimentation, Modern Nightmares and Lone Madmen in the Twentieth Century," *EMBO Reports* 4:S47-S52 (2003).

2 "The Biological Weapons Convention," United Nations Office for Disarmament Affairs, available at www.un.org/disarmament/WMD/Bio/.

3 There is a distinction between "offensive" and "defensive" biological warfare agents. Signatory countries are allowed to maintain secure stockpiles of biological agents to maintain vaccine and antidote stores.

4 The list of non-signatory states can be found at www.opbw.org.

5 Albeit in smaller quantities than could be produced by a nation-state.

6 The Centers for Disease Control and Prevention defines bioterrorism as "the deliberate release of viruses,

Bruce Ivins, a trained microbiologist employed by the U.S. Department of Defense.⁷

Another set of biological attacks occurred in April and May 2013. Two separate ricin letter attacks were allegedly carried out by individuals who, with little to no scientific experience and support, were able to create a biological agent, albeit one that may not have had the potency of an effective weapon.⁸ Compared to the 2001 anthrax letters, the 2013 ricin letters illustrated a transition in BW production from the trained individual to the layman, as it has been alleged that the first set of letters was sent by a karate instructor from Tupelo, Mississippi,⁹ and the second set from a part-time actress and housewife from Dallas, Texas, who pleaded guilty to sending the letters in December 2013.¹⁰ These recent incidents demonstrated that a relatively low level of sophistication and technological knowledge were no bar to deployment of a WMD.¹¹

bacteria, or other germs (agents) used to cause illness or death in people, animals, or plants." See the Centers for Disease Control and Prevention, available at www.emergency.cdc.gov/bioterrorism/overview.asp.

7 On February 19, 2010, the U.S. Justice Department, the FBI, and the U.S. Postal Inspection Service formally concluded the investigation into the 2001 anthrax attacks and issued an Investigation Summary. Dr. Ivins took his own life before charges could be filed against him.

8 The term "support" means both physical and financial support; specifically, access to laboratories such as research universities or pharmaceutical companies.

9 "Trial of Mississippi Man Charged with Sending Ricin Letters May be Delayed," Associated Press, September 13, 2013.

10 Shannon Richardson pleaded guilty on December 10, 2013, to sending the ricin-laced letters in an effort to frame her husband. See "Texas Woman Pleads Guilty to Sending Ricin to President," Associated Press, December 11, 2013.

11 Ricin is a small, toxic carbohydrate-binding protein found in castor oil beans. To be an effective BW agent, it must be extracted from the beans and purified to a concentration to deliver an aerosolized dose of a specific range of micrograms per kilogram. Consequently, for a person weighing 180 pounds, a specific amount of micrograms of ricin would need to be present for it to be fatal. (In terms of sophistication, a ricin letter is a simple device and does not require a complex dispersion method since it is presumed that the person opening the letter is the intended target. Neither the exact concentration nor dispersal properties of the ricin in the letters have been made public; however, the concentration was high enough to set off detectors in the mail-processing facilities.)

The ability of non-scientists to create and deploy a biological weapon highlights the emergence of a new threat, the "biohacker." "Biohacking" is not necessarily malicious and could be as innocent as a beer enthusiast altering yeast to create a better brew. Yet the same technology used by a benign biohacker could easily be transformed into a tool for the disgruntled and disenfranchised¹² to modify existing or emerging biological warfare agents and employ them as bioterrorism. A 2005 *Washington Post* article by Steve Coll and Susan Glasser presciently stated that "one can find on the web how to inject animals, like rats, with pneumonic plague and how to extract microbes from infected blood...and how to dry them so that they can be used with an aerosol delivery system, and thus how to make a biological weapon. If this information is readily available to all, is it possible to keep a determined terrorist from getting his hands on it?"¹³

This article argues that the biohacker is a real and existing threat by examining evasive biohacking strategies and limitations of current detection methods. The article finds that more active measures are required to stem the growing, long-term threat of modified BW agents employed by individuals. The biohacker is not only a credible threat, but also one that can be checked through improved detection and by disrupting BW agent delivery methods.

The Danger of Biological Warfare Agents

Biological agent weapons, unlike conventional weapons or other WMD, have the potential to create a runaway uncontrollable event. The damage of a bomb or artillery shell is constrained by the blast radius. The effects of chemical and nuclear WMD dissipate over time, albeit with a broad range of half-lives, environmental diffusivities, and ease of decontamination. In contrast, BW are microorganisms that upon dissemination

(For more details on ricin, see "Biosafety in Microbiological and Biomedical Laboratories," Centers for Disease Control and Prevention, December 2009.

12 A bioterrorist is one who simply employs biological weapon agents unmodified, while a terrorist biohacker is one who modifies a known toxin or biological agent with malicious intent.

13 Steve Coll and Susan B. Glasser, "Terrorists Turn to the Web as Base of Operations," *Washington Post*, August 7, 2005.

could proliferate exponentially within a single host, linger, and spread from one host to another. BW, therefore, have the potential to be unbounded in both space and time. The hosts themselves serve as potent amplifiers for the agent. Common to all BW agents is the existence of a lag time between time of infection and onset of symptoms. This lag time or incubation period allows infected individuals to feel healthy and to continue with their lives asymptotically,¹⁴ which increases the potential for spreading.

The Defense Advanced Research Projects Agency (DARPA) commissioned a JASON study in 2003 to examine the best means to detect, identify, and mitigate the effects of a biological agent release within the United States.¹⁵ The study emphasized that current technologies and those expected to be developed within the next five years could not achieve a nationwide blanket of biosensors.¹⁶ Instead, sensors that are currently available should be used at critical locations according to a pre-established “playbook.”¹⁷ Outside the range of these critical nodes, biosurveillance against a bioterrorism event would be accomplished through

14 The impact of BW agents on human health proceeds from organ failure and tissue destruction, but is ultimately defined by toxic effects on cellular functions, with the most severe being cell death. Consequently, before the effects are seen at the level of the organism, they occur on the molecular and cellular scale, and continue from the point of infection and even beyond the appearance of medical symptoms. Presymptomatic detection of early signatures of an infection could mitigate some threats.

15 The study was conducted by JASON, an independent group of scientists operating through the MITRE Corporation, who advise the U.S. government on issues related to science and technology.

16 “Biodetection Architectures,” JASON, February 2003.

17 The Joint Biological Point Detection System (JBPDS), a continuous environmental aerosol monitor, is currently available for point biosurveillance. These devices collect samples over a certain interval and then the sample is transported to a “central laboratory” for analysis. Detection of a biological agent in a city, for example, would require a large area of systems and technicians not only to collect samples but also to test them. The cost of extending the JBPDs beyond the few existing, strategic locations would be overwhelming. Advances in technology will undoubtedly produce compact, lower-cost automated detection systems that could be much more widely disseminated, but this then presents an increased risk for accidental or intentional false alarms and hence requires a rapid and highly accurate second-level validation.

medical surveillance. The essential component of such surveillance would be the “American people as a network of 288 million¹⁸ mobile sensors with the capacity to self-report exposures of medical consequence to a broad range of pathogens.”¹⁹ As a result of the H1N1 flu pandemic, the 2012 National Strategy for Biosurveillance further reiterated the findings of the JASON report and called for medical biosurveillance to move beyond chemical, biological, radiological and nuclear (CBRN) threats. This expansion increases medical surveillance to examine a “broader range of human, animal, and plant health challenges,”²⁰ in an effort to improve early detection of emerging diseases, pandemics, and other exposures.

Medical biosurveillance, however, has an intrinsic limitation: it is entirely dependent on the self-reporting of symptoms and illnesses, which only occurs after an incubation period. This time lag is the window of opportunity for malicious activity by the biohacker aimed at increasing the damage and spread of BW effects. For example, delayed onset of symptoms and ease of international travel enable an individual from the United States to be anywhere in the world within a few hours of BW exposure, potentially infecting hundreds if not thousands along the way. From the biohacker’s point of view, a highly virulent pathogen with a short incubation interval and rapid mortality may not be as desirable as a less virulent one, which would allow the infected individuals to travel greater distances before exhibiting symptoms or dying. A biohacker possesses several strategies to maximize the BW incubation period to evade or alter the medical biosurveillance network.

18 The value of 288 million is based on the census data available during the 2003 study by JASON.

19 “Biodetection Architectures.”

20 The National Strategy for Biosurveillance signed in July 2012 specifically said, “Where efforts since the tragic terrorist attacks of September 11, 2001, have focused largely on threats associated with the deliberate use of CBRN weapons, this Strategy embraces the need to engage in surveillance for WMD threats and a broader range of human, animal, and plant health challenges, including emerging infectious diseases, pandemics, agricultural threats, and food-borne illnesses.”

Strategies of the Biohacker

Many biological warfare agents are naturally occurring around the world or easily derived from plants and could be transformed by biohacking.²¹ The advent of modern technologies enables the biohacker to employ one or a multitude of strategies to increase the tactical or strategic effectiveness of a biological agent. The authors distinguish five of these strategies as “Wolf in Sheep’s Clothing,” “Trojan Horse,” “Spoof,” “Fake Left,” and “Roid Rage.”²²

A “Wolf in Sheep’s Clothing” occurs when a biological organism or toxin is modified through genetic engineering so that it can be expressed in an active form but does not present the normal epitopes.²³ In a “Trojan Horse,” a biohacker maintains the epitope of a non-threatening agent but re-engineers the active component of the toxin to increase the biological threat without increasing the detectability. The “Spoof” occurs when a benign agent is

21 For example, ricin can be derived from castor oil beans, anthrax can be found in the soil around certain domestic and wild animals, botulism, which is endemic in some environments, can be cultured by anaerobic purification of meat, and plague can be carried by wild rodents and transmitted to humans via fleas.

22 This classification of biohacker strategies was developed by John Wiksw, David Cliffl, and John McLean at Vanderbilt University and presented in December 2012 at the Johns Hopkins University Applied Physics Laboratory’s Cellular Sensing Systems Workshop.

23 Epitopes are specific amino acid sequences on the surface of a cell, or certain BW agents such as anthrax that invoke a specific immune response. The unique amino acid sequences are identifiable traits of certain BW agents and are viewed as biomarkers. The concept of epitope can be extended to include any amino acid sequence that can be detected through a molecular affinity assay, such as aptamers. See, for example, Larry Gold et al., “Aptamer-Based Multiplexed Proteomic Technology for Biomarker Discovery,” *PLoS One* 5:12 (2010). Separately, gene expression dynamic inspection (GEDI) studies (Sui Huang et al., “Cell Fates as High-Dimensional Attractor States of a Complex Gene Regulatory Network,” *Physical Review Letters* 94 (2005)) demonstrate that HL-60 under different environmental conditions will present different genes throughout their transformation process to neutrophils, 168 hours later. So identification through gene expression at a given time point would identify two different agents. The concept of gene expression phase space and epigenetic attractors is treated in more detail in Sui Huang and D. E. Ingber, “A Non-Genetic Basis for Cancer Progression and Metastasis: Self-Organizing Attractors in Cell Regulatory Networks,” *Breast Disease* 26 (2007).

modified to express epitopes distinctive of a known toxin in order to trigger an unnecessary protective response by the target parties (the local, state, or federal government), while the delivering party (the biohacker) can afford to remain unencumbered. The “Fake Left” is a means to modify through selection or genetic engineering the method of transmission of an organism (for example, one that is typically passed by fluid to an airborne method). Such modification makes it easier to disperse an agent among a target population. The “Roid Rage” strategy aims to potentiate the effects of a common virus by expressing components of a deadly virus, such as expressing Ebola virus RNA sequences into the common flu virus. An infected person would demonstrate symptoms of the flu, hampering early detection and treatment of Ebola and favoring its deadly outcomes.

Any of these strategies could be used separately or in conjunction with one another. These strategies also do not require large or sophisticated laboratories to accomplish.²⁴ Moreover, at the biohacker’s disposal is a plethora of scientific data. For example, an article from a major medical journal published last year on the avian flu virus highlighted the five specific genetic modifications required to transmit the virus from ferret to ferret, a model used since ferrets are susceptible to the same flu viruses as humans. Such information provides a framework for biohackers to implement their strategy.

Defending Against the Biohacker

Improving Detection Methods

Advances in biotechnology and genetic engineering facilitate the modification of more BW agents with increased toxicity, transmissibility, and lethality. Many bioengineering companies around the world now openly sell “all-in-one” kits for researchers to perform recombinant DNA experiments.²⁵ Such kits are available to the public and provide the

24 The Aum Shinrikyo cult in 1993 twice dispersed large amounts of anthrax around Tokyo using a variety of methods. The anthrax strain acquired by the cult was designed as a vaccine for cattle, and therefore did not have any effect on humans. See Amanda Onion, “Lessons from Failed 1993 Biological Attack,” ABC, October 5, 2001.

25 One such example is the “AllPrep DNA/RNA/Protein Mini Kit” by Qiagen Technologies. A single kit, which can be used on 50 samples, costs \$565.

ability to modify known bioagents. Technological advances and lowering costs make the biohacker a viable threat, but they also enable counter-bioterrorism through cheaper and more reliable detection and identification systems.²⁶

One accessible means to thwart the biohacker is the development of physical, chemical, and biological sensors that reliably detect and identify a biological agent by its mechanism of action. For example, the International Genetically Engineered Machine (iGEM) Foundation supports a yearly competition in which competitors are given a “kit of biological parts” and through their own design are expected to build synthetic “biological systems and operate them in living cells.”²⁷ The innovative goals of the iGEM competition in its 242 laboratories worldwide are to promote biosafety and biosecurity by focusing on therapeutics or toxin detection/identification.

Detecting Host Response

Of the various strategies to detect a toxin, the most straightforward focuses on the specific molecular epitope of the active agent, either through molecular recognition (for example, a distinctive surface protein on the organism), or the detection of genetic material specific to a particular pathogen. Unfortunately, these signals can be very weak early into the infection of an individual, and the organisms themselves may be sequestered from ready observation, as was the case with the AIDS virus.²⁸ The solution to these problems is to continue to increase the sensitivity and specificity of the detection methods, but this in turn may increase vulnerability to hacking. Since these methods depend heavily on the ability to detect specific epitopes, several of the biohacking strategies listed above could be

26 Recently published articles highlight that the presence of biological weapons agents can be measured in real time and at minimal concentrations. Work by Eklund et al. (2009) demonstrated the dynamic metabolic responses in microphysiometer experiments to 100 nano-molar ricin and 1 to 2 micro-molar anthrax concentrations.

27 See the International Genetically Engineered Machine (iGEM) Foundation, located at www.igem.org.

28 J. Gallarda et al., “Early Detection of Antibody to Human Immunodeficiency Virus Type 1 by Using an Antigen Conjugate Immunoassay Correlates with the Presence of Immunoglobulin M Antibody,” *Journal of Clinical Microbiology* 30:9 (1992).

utilized. An alternative approach is to focus not on the agent itself, but on the host response to the agent. In this case, the host serves as an amplifier that produces a multitude of cellular signaling molecules that can potentially be measured to provide an identifying signature, ideally before the onset of clinical symptoms.²⁹ The host response does not need to be measured in a person since live cell bioreactors with orthogonal quantitative measurements could provide the identifiable signature.³⁰ While there is no guarantee that the detailed dynamic host response will be pathogen-specific, early detection of an infection is still beneficial by triggering the administration of a drug, a cytokine, or a combination thereof to block progression of the infection.³¹

Disrupting Delivery

One intrinsic limitation of biohacking is the delivery system. Microorganisms require either a host or stable laboratory cell culture conditions to survive, but some can be effectively placed in a passive spore state that simplifies transmission.³² Delivery of biological agents is not trivial. Many biological agents, such as anthrax

29 A recent study examined the blood transcriptome of volunteers inoculated with influenza and developed a predictive signature. See Christopher Woods et al., “A Host Transcriptional Signature for Presymptomatic Detection of Infection in Humans Exposed to Influenza H1N1 or H3N2,” *PLOS One* 8:1 (2013).

30 This means that by using a variety of instruments and technology in a cellular culture system, it is possible to measure changes in proteins, electro-chemical responses, changes in cellular morphology and changes in cell motility. These simultaneous measurements provide a unique signature which is distinct for each bio-agent, making early detection possible by detecting the initial cellular changes.

31 See X. Qui et al., “mAbs and Ad-Vectored IFN- α Therapy Rescue Ebola-Infected Nonhuman Primates When Administered After Detection of Viremia and Symptoms,” *Science Translational Medicine* 5:207 (2013): pp. 143-153, for a recent report on blocking Ebola in non-human primates by using a combination of antibody therapy cocktails and interferon.

32 Harvey Lodish et al., *Growth of Microorganisms in Culture, in Molecular Cell Biology* (New York: W.H. Freeman, 2000); V. R. Dowell, Jr., et al., “Coproexamination for Botulinal Toxin and Clostridium Botulinum. A New Procedure for Laboratory Diagnosis of Botulism,” *Journal of the American Medical Association* 238:17 (1977); J.R. Koransky, S. D. Allen and V. R. Dowell, Jr., “Use of Ethanol for Selective Isolation of Sporeforming Microorganisms,” *Applied and Environmental Microbiology* 35:4 (1978).

and ricin, are not transmittable from person to person, hence the delivery of millions of spores over a large area is required. Yet, conventional dispersion through munitions would destroy the spores or toxin. The “weaponization” of pathogens may require a certain level of sophistication, but even a non-weaponized agent can have a significant psychological effect. Agents such as Ebola, which are transmittable from person to person, are relatively unstable outside the host, further complicating delivery. Smallpox is an example of a potential agent that is transmittable from person to person and is stable outside the host, but the potential for infection is limited by the smallpox vaccine.³³ Programs to develop specific vaccines, particularly those for animal-borne disease, could provide additional protection.³⁴ Through knowledge management of scientific data, it might be possible to impede the development of a stable delivery system for malicious purposes.³⁵

Curbing Production

In addition, certain equipment and materials, such as fermenters, incubators, enzymes, and retroviruses, are required to modify agents. Limiting the sale or, at the least, monitoring the sale of such materials would also make it difficult for a biohacker to create a modified biological agent undetected. Some of the technologies are simple enough, however, that they could be adapted from readily available consumer items, and even the more complex biological reagents, such as lenti-viruses and specific cell lines, are readily obtainable through research supply companies. Given these challenges, it is important to maintain a strong national effort in detection and prophylaxis bioagent production equipment and supplies.

33 “FM 3-11.9 Potential Military Chemical / Biological Agents and Compounds,” U.S. Army Chemical School, January 2005.

34 “A World Free of One of the Most Virulent Animal Diseases?” U.S. Department of Homeland Security, undated.

35 There are several websites through which biohackers share information. A few that are easily found are DIYbio.com, grindhousewetware.com, and dangerousthings.com. If not already in place, a rigorous program to monitor such sites should provide valuable intelligence on possible emerging threats and low-cost BW technologies.

Conclusion

Unlike conventional weapons or other WMD forms, biological weapons are difficult to contain. The time period that naturally occurs between release and identification provides an opportunity for the pathogen to spread silently. This time period could increase if the biohacker becomes more skilled at hiding agents or modifying incubation times, causing increased transmission. Current detection methods, such as medical biosurveillance and the Joint Biological Point Detection System, abide by the detect-to-treat mentality: they are passive and geared to react to signs of an outbreak or bioagent deployment. In contrast, modern technology makes it possible to move to a detect-to-prevent strategy. The key to such a strategic leap is to reduce drastically the lag time required to correctly identify the bioterrorist and respond accordingly.

The paradox of new scientific methods and technology, however, is that they lead not only to new discoveries in terms of medicine, but also provide information that enables the biohacker. In a world accustomed to well-defined toxin epitopes and detector receiver-operator characteristics, the hacking of a toxin can be manifested in many ways; for example, in the presentation of an unexpected epitope that could render an existing detection platform ineffective. The modification of BW agents not only makes their identification difficult, but also may render the known therapeutic methods ineffective.

The 2013 ricin letters, in conjunction with the multitude of low-cost tools and strategies available, highlight that the biohacker is a real and contemporary threat. Combating the capabilities of the biohacker will be neither easy nor inexpensive.³⁶ Although the biohacker still has significant obstacles of production and dispersion to overcome to effectively devastate a large population, the availability of technology and scientific information makes this an impending danger. Continued research is required to

36 The FY2013 Federal Budget allocated for biodefense was \$5.53 billion including monies for basic research for vaccines as well as advanced research for detection. See C. Franco and T. Sell, “Federal Agency Biodefense Funding, FY2012-2FY013,” *Biosecurity and Bioterrorism* 10:2 (2012).

develop identification tools that are in front of the medical biosurveillance lag time. The fiscal costs of biodefense are high for continued research and development, but the risk of not stemming the means of the biohacker is even greater.

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The Spanish Foreign Fighter Contingent in Syria

By Fernando Reinares and Carola García-Calvo

SINCE THE START of the conflict in Syria, foreign fighters from various European countries have joined the war against the Bashar al-Assad regime. Spain has not been immune to this mobilization. According to Spanish counterterrorism officials, at least 17 Spanish residents joined jihadist groups in Syria between April 2012 and November 2013.¹ Those jihadist groups include Jabhat al-Nusra (JN), the Islamic State of Iraq and the Levant (ISIL) and Harakat Sham al-Islam. Additionally, Spain's corresponding security agencies in Morocco have identified three other Spanish residents who have traveled to fight with jihadist groups in Syria.

In total, Spanish and Moroccan counterterrorism services estimate that 20 Spanish residents have traveled to fight with jihadist groups in Syria.² Eleven of the 20 are Spanish citizens, while the remaining nine are Moroccan nationals living in Spain.³ Separately, an estimated 25 other Spanish residents have traveled to fight in Syria for the non-jihadist Free Syrian Army (FSA).⁴

This article examines the 20 known Spanish residents who traveled to Syria to fight with JN, the ISIL and Harakat Sham al-Islam. It finds that 11 are Spaniards, suggesting that homegrown jihadist activity is becoming a more salient phenomenon in Spain, even if territorially concentrated in Ceuta. Most of the 20 individuals had no known jihadist activity predating their decision to join the war in Syria, but

they were radicalized and recruited top-down by experienced agents with wide international connections active in the Spanish-Moroccan jihadist network.

Spanish and Moroccan Men from Ceuta

Most of the 11 Spaniards who joined jihadist groups in Syria are from the city of Ceuta, a Spanish enclave across the Gibraltar Straits in North Africa surrounded by Moroccan territory. Ceuta's population is close to 85,000 people, of which approximately 37% are native Muslims.⁵ The nine Moroccans who joined jihadist groups in Syria lived in Ceuta, as well as in peninsular localities such as Girona in Catalonia and Malaga in Andalusia.⁶

Ceuta has experienced jihadist activity in the past.⁷ In 2006, security forces conducted Operation Duna in the city, apprehending 10 Spaniards and one Moroccan accused of involvement in jihadist terrorism, although nine of those finally indicted were all subsequently absolved.⁸ In 2007,

5 "Estudio demográfico de la población musulmana 2012," Union de Comunidades Islámicas de España, February 2013.

6 Jefatura de Investigación UCE-2 de la Guardia Civil y Comisaría General de Información del Cuerpo Nacional de Policía, Atestado policial 9883 (June 24, 2013), "Anexos," p. 428.

7 Javier Jordán and Huberto Trujillo, "Favorable Situation for Jihadist Recruitment: The Neighbourhood of Príncipe Alfonso (Ceuta, Spain)," *Jihad Monitor* 3 (2006); Luis de la Corte, "Actividad yihadista en Ceuta: antecedentes y vulnerabilidades," Real Instituto Elcano, June 19, 2007. As for press reports, see for example Carmen Echarri, "Ceuta: cuna de radicales," *ABC*, December 26, 2006; Carmen Echarri, "Preocupación en círculos religiosos de la ciudad por el auge extremista," *El Faro Digital*, June 17, 2012; José M. Irujo, "Pescar suicidas en el pozo ceutí," *El País*, September 8, 2013.

8 Audiencia Nacional, Sala de lo Penal, Sección Cuarta, "Sentencia 20/2012." The court acknowledged that the accused were in possession of abundant proselytizing material exalting jihad, but determined that there was no proof of their intention to engage in terrorist actions, nor, according to the judges, enough evidence of them belonging to a formal terrorist organization. In addition, the declarations of two protected witnesses were invalidated due to legal technicalities. It must be pointed out that Spain's antiterrorist legislation was reformed in 2010 to add new offenses such as those related to terrorist indoctrination and recruitment, and to redefine the concept of a terrorist organization to include smaller and less articulated varieties. On these and other changes in Spain's antiterrorist legislation, see María Ponte, "La reforma del Código Penal en relación a los delitos de terrorismo,"

authorities arrested three Spaniards living in Ceuta and convicted them of illegal activities related to jihadist terrorism.⁹ Between June and September 2013, Operation Cesto concluded, and the police detained 10 suspects on charges of belonging to a terrorist network with international connections, engaged in the radicalization and recruitment of individuals for al-Qa`ida-related entities in Syria.¹⁰ Nine of them were nationals of Spain living in Ceuta, while one was in Belgium, where he was arrested.¹¹ Some of these detainees were ready to travel to Syria, but the police intervention disrupted their plans.¹² It is through investigations which led to Operation Cesto that authorities identified the majority of the 20 Spanish residents who went to fight with jihadists in Syria.¹³ As part of the investigations, authorities detected a cybercommunity in 2012, which facilitated the identification of some of those who became jihadists in Syria.¹⁴

Of the 20 Spanish residents who have traveled to fight for jihadist groups in Syria, all are male. Although further data has not been made available in three cases, 17 are between 15- and 49-years-old, the majority between their mid-20s and early 30s, generally married and with children.¹⁵ At the time of their departure, they were mainly taxi drivers, unskilled workers, students or unemployed.¹⁶ Several had participated in episodes of street aggression against police in the restive Ceuta neighborhood of Príncipe Alfonso and had previously faced drug trafficking charges.¹⁷

Grupo de Estudios en Seguridad Internacional, 2010.

9 Audiencia Nacional, Sala de lo Penal, Sección Segunda, "Sentencia 31/2009" and "Sentencia 49/2011."

10 Atestado policial 9883, pp. 45-73. José María Irujo, "Detenido en Bélgica el jefe de la red ceutí que envía suicidas a Siria," *El País*, September 26, 2013; "Detenido en Bélgica el líder de la red yihadista desarticulada en Ceuta," *ABC*, September 26, 2013.

11 Ibid.

12 Atestado policial 9883, "Anexo," pp. 459-460.

13 Ibid., p. 12

14 Ibid.

15 Atestado policial 9883, pp. 45-73.

16 "Tres de los detenidos trabajaban en el CETI y en los Planes de Empleo," *El Faro Digital*, June 24, 2013; Carmen Echarri, "El fenómeno de las captaciones," *El Faro Digital*, June 24, 2013.

17 Gonzalo Testa, "Quien empieza lanzando piedras llega al narco y acaba viendo la luz de Dios," *Ceuta al Día*, June

1 Much of the content of this article is derived from interviews with counterterrorism officials of the Spanish security forces (Fuerzas y Cuerpos de Seguridad del Estado, FCSE) and the National Antiterrorism Coordination Center (Centro Nacional de Coordinación Antiterrorista, CNCA), as well as with specialized public prosecutors at the National Court (Audiencia Nacional, AN), in Spain throughout October and November 2013. The authors also spoke with leading members of the Directorate General of National Security (Direction Générale de la Sûreté Nationale, DGSN) in Morocco. The authors wish to thank all of their interlocutors.

2 Ibid.

3 Ibid.

4 Ibid.

Overall, except for the nationality variable, these figures correspond to the basic sociodemographic characterization of individuals convicted for jihadist terrorism activities or killed in an act of suicide terrorism in Spain since the mid-1990s.¹⁸

Recruited for JN, the ISIL and Harakat Sham al-Islam

All of the 20 fighters joined JN, ISIL and, to a lesser extent, Harakat Sham al-Islam, the latter of which is a group formed around Moroccans fighting in Syria.¹⁹ At least 16, but probably up to 19, of these individuals had no known jihadist trajectory predating the current Syrian conflict. The one individual who had established connections to a jihadist group was the Syrian-born Mouhannad Almallah Dabas, a naturalized Spaniard. Dabas was formerly connected to the al-Qa`ida cell established in Spain in the mid-1990s led by Abu Dahdah until its dismantling in November 2001.²⁰ Dabas was indicted in the 2004 Madrid train bombings case and convicted at the National Court, although later the Supreme Court overturned his sentence.²¹

Dabas went initially to Syria in 2012 and was there again in 2013 in the company of his two teenage sons, allegedly to aid JN's logistical activities.²² According to a confidential Spanish police source, he helped transfer resources from the United Kingdom to JN in Syria.²³ He was killed in Homs in October 2013.²⁴ Although media reports have reported that Dabas boasted of ties to the FSA,²⁵ Spanish authorities contend that he joined JN, and likely made the FSA claim to conceal his involvement with the jihadist group since that would have been considered a terrorist offense under the Criminal Code of Spain.²⁶

Intense Radicalization Process

Before becoming members of JN, the ISIL or Harakat Sham al-Islam, those who lacked jihadist experience in Ceuta underwent an intense radicalization process by means of closed door gatherings inside Islamic worship places and private homes as well as open air activities—which included physical training—in Ceuta and nearby localities across the border in Morocco, in particular Fnideq (Castillejos).²⁷

An established Moroccan-Spanish network organized these activities. Two to three radicalization and recruitment agents operated on Spanish territory, but were skilled at working on both sides of the Spanish-Moroccan border.²⁸ Operation Cesto, which developed between June and

September 2013, dismantled the portion of this network that operated on Spanish territory.²⁹

These recruiters indoctrinated individuals by highlighting religious rulings from radical clerics in the region that sanctioned the killing of Shi`a or more specifically Alawite Muslims, the latter of which comprise the ruling elites in Damascus.³⁰ The presence of radical imams is not a new occurrence in Ceuta. In June 2012, for example, a well-known Moroccan radical imam from Tetouan, who spent years in prison after the Casablanca bombings in 2003, preached at the Attauba mosque located in the Príncipe Alfonso area within Ceuta. Several of the individuals who traveled to fight in Syria had attended this mosque.³¹

Generally speaking, however, the aspects of radicalization leading these 20 individuals to join jihadist groups in Syria are not different from those observed for a majority of the jihadists radicalized and recruited previously in Spain.³² As in prior cases, the radicalization and recruitment process was often facilitated by existing bonds based on kinship and friendship.³³ Recruitment was nevertheless stimulated through economic incentives to help families of the recruited.³⁴ Money for this purpose came from a mixture of donations and illegal trafficking.³⁵

24, 2013.

18 Fernando Reinares and Carola García-Calvo, "Los yihadistas en España: perfil sociodemográfico de condenados por actividades terroristas o muertos en acto de terrorismo suicida entre 1996 y 2012," Real Instituto Elcano, 2013.

19 Atestado policial 9883, pp. 22-26.

20 José M. Irujo, *El Agujero. España invadida por la yihad* (Madrid: Aguilar, 2005), pp. 244, 267, 275; Lorenzo Vidino, *Al Qaeda in Europe. The New Battleground of International Jihad* (New York: Prometheus Books, 2006), pp. 322-323.

21 Contrary to the Audiencia Nacional judges, the Supreme Court, in the Sentencia 503/2008 of its Sala de lo Penal, absolved Mouhannad Almallah Dabas despite acknowledging that evidence showed his "inclination" towards "violent ideas related to the imposition of his own radical Islamism." Another decision, namely Sentencia 38/2011, of the Sala de lo Penal, Sección Segunda, at Audiencia Nacional, understood that proven facts "would place the activity of the accused at the doors of collaboration with a terrorist organization." Again, this decision acknowledged that these proven facts included relations with radical Islamists and activities of indoctrination leading to jihadism. In that time period, however, this was not an offense under Spain's Criminal Code. Almallah Dabas was finally absolved of the charges. Changes to Spain's Criminal Code in 2010 would now consider those activities a crime.

22 Personal interview, senior Spanish police counterterrorism intelligence officer with in-depth knowledge of jihadists of Syrian origin active in Spain since the 1990s and extensive contacts with Spanish nationals of Syrian origin involved in domestic affairs of their native country, Madrid, November 5, 2013.

23 Ibid.

24 Ibid. Amanda Figueras, "Un absuelto del 11-M muere en Siria delante de uno de sus hijos," *El Mundo*, October 10, 2013.

25 "Muere en Siria un absuelto del 11-M que estuvo casado con una ceutí," *El Faro Digital*, October 29, 2013; Amanda Figueras, "Un absuelto del 11-M muere en Siria delante de uno de sus hijos," *El Mundo*, October 10, 2013.

26 Personal interview, senior Spanish police counterterrorism intelligence officer with in-depth knowledge of jihadists of Syrian origin active in Spain since the 1990s and extensive contacts with Spanish nationals of Syrian origin involved in domestic affairs of their native country, Madrid, November 5, 2013.

27 Atestado policial 9883, pp. 17, 430-442.

28 Ibid., pp. 48-54.

29 Ibid., p. 1.

30 Ibid., p. 17.

31 Ibid., p. 27. Echarri, "Preocupación en círculos religiosos de la ciudad por el auge extremista." A spokesman for the Attauba mosque in Ceuta, interviewed by *El Faro Digital* on June 29, 2012, claimed afterwards that they were radicals if "radical means to follow the Qur'an and the Sunna."

32 Carola García-Calvo and Fernando Reinares, "Procesos de radicalización violenta y terrorismo yihadista en España: ¿cuándo? ¿dónde? ¿cómo?" Real Instituto Elcano, 2013.

33 Carmen Echarri, "Varios marroquíes con residencia han marchado ya a tierras sirias," *El Faro Digital*, May 19, 2013; "No hablamos de combatientes sino de terroristas yihadistas," *El Faro Digital*, June 23, 2013.

34 Atestado policial 9883, pp. 32-33.

35 Ibid., pp. 28-32.

From Spain to Syria through Turkey

Most jihadists from Spain took a similar route to reach Syria.³⁶ They left Ceuta by ferry to Algeciras in Spain's Cadiz Province, and then took a plane from Malaga or Madrid to Istanbul. In a couple of cases, they took a flight from Casablanca to Istanbul.³⁷ Once in Turkey, they generally boarded another flight to southeastern Hatay Province, where facilitators belonging to one of the three previously mentioned jihadist groups moved them into Syria.³⁸

After reaching Syria, the recruits were incorporated into training camps. Depending on their personal characteristics and aptitudes—one of the recruits, for example, was deaf—some were assigned to militant cells, while others were sent on individual suicide missions.³⁹

At least three of the 20 became suicide bombers. All three were young Muslim Spanish nationals residing in Ceuta.⁴⁰ The most lethal of the suicide attacks, which alone reportedly caused more than 100 deaths, was executed near a military installation in Idlib Province in June 2012.⁴¹ JN claimed responsibility for the attack, releasing a video testament of the suicide bomber.⁴² The bomber explained how he prepared the truck bomb, smiled, and gave thanks to Allah, saying that conducting jihad "is the summit of the belief in Islam."⁴³

Implications

From a domestic threat perspective, there is concern that some of the Spanish residents fighting as jihadists in Syria could return home and conduct attacks in Spain or elsewhere in Europe. Although their stated purpose is to fight in Syria, they will gain terrorist experience and will be in the presence of hard core jihadists who espouse an anti-Western, pro-al-Qa`ida agenda.⁴⁴

According to court documents, intercepted phone conversations—both between those who traveled to Syria and those who were prepared to go but were instead arrested in Spain—revealed that they were also willing to "make jihad at home," meaning to perpetrate a terrorist attack in Spain if they were not able to reach Syrian territory.⁴⁵

Illustrating the Spanish government's concern and alert, one of the 20 known jihadists from Spain was arrested at Malaga airport upon his return from Syria on January 5, 2014.⁴⁶ The 28-year-old Spaniard allegedly joined the ISIL while in Syria.⁴⁷ Spanish authorities labeled him as a "very dangerous" individual, and warned that "returning jihadists" might be preparing attacks.⁴⁸ If history is a guide, the current trend of European citizens joining jihadist groups in Syria will create new security threats for Spain and other European countries in the years ahead.

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36 In the case of Mouhannad Almallah Dabas, apparently he traveled via London. See personal interview, senior Spanish police counterterrorism intelligence officer, Madrid, November 5, 2013.

37 Atestado policial 9883, pp. 18-19.

38 Echarri, "No hablamos de combatientes sino de terroristas yihadistas."

39 Atestado policial 9883, pp. 26, 43.

40 Carmen Echarri, "De testimonios vitales y pinchazos," *El Faro Digital*, June 23, 2013; "Muere en Siria otro de los ceuties integrante del grupo que partió en junio," *El Faro Digital*, August 22, 2013; "Al menos tres españoles de la red yihadista cometieron atentados suicidas en Siria," *El Mundo*, June 24, 2013.

41 Atestado policial 9883, pp. 21-23.

42 Ibid. Both the video testament and JN's claim of responsibility for the suicide attack were posted on the jihadist website <http://as-ansar.org> on August 20, 2012.

43 Echarri, "No hablamos de combatientes sino de terroristas yihadistas"; Atestado policial 9883, p. 39.

44 Spain's minister of interior referred to this at a press conference held in Madrid in June 2013. See "El ministro del Interior, Jorge Fernández Díaz, ha comparecido en rueda de prensa para informar de la detención de ocho presuntos integrantes de una red vinculada a la organización terrorista Al-Qaeda," Spain's Ministry of Interior, June 22, 2013.

45 Atestado policial 9883, pp. 1, 44.

46 "Detenido en España yihadista considerado 'muy peligroso' tras pasar por Siria," EFE, January 5, 2014.

47 Ibid.

48 Ibid.

Hizb Allah at War in Syria: Forces, Operations, Effects and Implications

By Jeffrey White

AS THE WAR IN SYRIA rages, the conflict has presented a major challenge to Lebanese Hizb Allah's military organization, command, and combat forces. Hizb Allah has embarked on sustained expeditionary warfare for the first time in its history and finds itself pitted against enemies it had neither sought nor prepared to fight, on unfamiliar territory, and in a cause different from its "resistance" *raison d'être*.

The war in Syria has not been easy for the group, and the conflict shines a light on Hizb Allah's combat performance and capabilities. Hizb Allah is gaining valuable knowledge of irregular warfare and actual combat experience, but this may have only limited relevance in a future conflict with Israel.

This article focuses on the military aspects of Hizb Allah's intervention in Syria. It examines Hizb Allah's known activities in Syria, evaluates its success in stabilizing the Bashar al-Assad regime, reveals the challenges the group faces in Syria, and identifies the implications of its involvement. It finds that the group is the most effective force on the Syrian battlefield and has been instrumental in the preservation of the al-Assad regime and in its offensive successes since the spring of 2013.

Hizb Allah's Known Activities in Syria

Hizb Allah has made a significant commitment of forces to Syria, but determining the actual number of personnel involved is difficult.¹ The

1 There are a number of issues affecting the ability to clearly identify and characterize Hizb Allah forces in Syria. First, there are Hizb Allah trained Alawite and Shi'a militia forces that employ Hizb Allah iconography. Second, Hizb Allah forces operate in a combination of roles with Iraqi Shi'a combat forces. Third, Hizb Allah units and personnel are working with regime regular and irregular forces to stiffen and advise them. Fourth, Hizb Allah is rotating forces in and out of Syria, increasing the difficulty of determining how many are present in any given period. Finally, Hizb Allah has become kind of a bogeyman, claimed to be "here, there, and everywhere" in opposition reporting.

high reported number of Hizb Allah forces estimated to have been committed to Syria is about 10,000,² but this likely reflects the total rotated through Syria, not the number present at any one time.³ The French foreign minister provided a more reasonable estimate of 3,000-4,000 in May 2013 during the height of the battle in Qusayr.⁴ In September 2013, Reuters cited “regional security officials” as providing an estimate of 2,000-4,000.⁵ Types of units and troops sent to Syria include “elite and special forces,”⁶ and “reservists.”⁷ Given the scope of reported Hizb Allah activity in Syria, including types of missions and areas of operation, up to 4,000 fighters seems a reasonable estimate.⁸

Based on videos of purported⁹ Hizb Allah combatants in Syria, they resemble regular soldiers. They are uniformed, have load bearing equipment, and in some cases wear protective vests.¹⁰ Weapons and equipment also seen with purported Hizb Allah forces in Syria include standard light infantry weapons (assault rifles, general purpose machine

guns), anti-tank guided missiles (ATGM) and rocket-propelled grenades (RPG), truck-mounted heavy machine guns (“Dushkas”), light mortars, and recoilless rifles.¹¹ Hizb Allah reportedly operated regime armored vehicles in the fighting in Qusayr,¹² but this was likely a situation in which Hizb Allah forces were operating with regime regular armored units.

The organization of Hizb Allah forces in Syria is unclear. One report, citing a “regional security source,” indicated that Hizb Allah functions with a command structure including Islamic Revolutionary Guard Corps (IRGC) and Syrian Army personnel and has been given specific geographic areas of responsibility.¹³ Based on the different geographic fronts where they are fighting, Hizb Allah forces are probably organized on a territorial basis with separate commands for forces in Damascus and its suburbs, Aleppo city and Aleppo Province, and Homs Province.¹⁴

Hizb Allah is one component of the diverse forces mobilized by the regime. These forces include: regime regulars from the army, air force, air defense force, and navy; irregular forces of the National Defense Force (NDF);¹⁵ allied forces from Iraq;¹⁶ and possibly some Iranian combat forces in small numbers.¹⁷

Hizb Allah has brought important capabilities to the war on the regime’s side. Its forces in Syria are essentially light infantry¹⁸ that can be depended on to execute both offensive and defensive missions in areas important to the regime.¹⁹ They have learned to cooperate with regime heavy forces including armor, artillery, and air units, and to work effectively with regime irregulars and allies.

Hizb Allah has conducted four types of military missions in Syria:

- A training mission for regime regular²⁰ and irregular²¹ forces in urban and counterinsurgency operations;
- A combat advisory role with regime regulars and irregulars;²²
- “Corseting”²³ operations, providing a key reinforcing component of allied Iraqi/Shi`a forces, such as in the Damascus suburbs;²⁴

2 See “More than 10,000 Hezbollah Members Fighting in Syria Source Says,” Now, August 25, 2013; Tony Badran, “Hezbollah and the Army of 12,000,” Now, July 24, 2013.

3 According to Phillip Smyth: “Hezbollah has rotated its fighters in and out of Syria for different intervals... It is important to remember that Hezbollah has rarely truly utilized heavy deployments inside Syria. Instead, the group has primarily functioned as a ‘core-force’ of extremely well-trained, equipped and motivated fighters who could act as the sharp tip of a pro-Assad spear.” See Phillip Smyth, “Does Hezbollah’s Partial Exit from Syria Mean Anything?” *The National*, October 30, 2013.

4 “France Says 3,000-4,000 Hezbollah are Fighting in Syria,” Reuters, May 29, 2013.

5 “Special Report: Hezbollah Gambles All in Syria,” Reuters, September 26, 2013.

6 Mona Alami, “Another Border War?” Now, October 22, 2013.

7 “Special Report: Hezbollah Gambles All in Syria.”

8 The reported mobilization of Hizb Allah reserves to back-fill in Lebanon for forces sent to Syria supports the idea of a significant force commitment in Syria. See “Hezbollah Mobilizes on the Ground and Calls for Reservists,” *Beirut Observer*, June 6, 2013.

9 It can be difficult to distinguish on videos among Hizb Allah, regular Syrian, and Iraqi elements fighting in Syria as they work closely together.

10 See, for example, “Unseen Footage of Hezbollah Operations in Syria,” Islamic TV Channel, December 1, 2013, available at www.youtube.com/watch?v=tgoHOKOvOG0.

11 See, for example, “Unseen Footage of Hezbollah in Operation Against Al Nusrah,” Islamic TV Channel, November 30, 2013, available at www.youtube.com/watch?v=8T47pyAoSMk.

12 Amos Harel, “Hardened in Syria War, Hezbollah Presents New Set of Threats,” *Haaretz*, November 13, 2013.

13 “Special Report: Hezbollah Gambles All in Syria.”

14 This would be in keeping with Hizb Allah’s practice of organizing its forces in southern Lebanon into geographically based formations. By 2010, three geographic commands—the Northern, Western and Central Units—had been organized in the south. See “Intelligence Maps: How Hezbollah Uses Lebanese Villages as Military Bases,” Office of the Israel Defense Force Spokesperson, July 7, 2010.

15 “Insight: Battered by War, Syrian Army Creates its Own Replacement,” Reuters, April 21, 2013.

16 Omar al-Jaffal, “Iraqi Shiites Join Syrian War,” *al-Monitor*, October 29, 2013.

17 See, for example, “Video Shows Iran Aiding Syrian Regime’s Fight Against Rebels,” CBS, October 31, 2013; Phillip Smyth, “Hezbollah Cavalcade: Iran’s Losses in the 35th Province (Syria), Part 1,” *Jihadology.net*, June 13, 2013.

18 Light infantry are typically infantry without heavy weapons such as tanks, APCs and field artillery. They may have mortars for fire support and trucks for mobility.

19 Jeff Neumann, “Hezbollah’s Military Prowess Gives Boost to Syrian Troops,” *Alaska Dispatch*, June 17, 2013.

20 “Hezbollah Involvement in the Syrian Civil War,” Meir Amit Intelligence and Terrorism Information Center, June 17, 2013, p. 16.

21 “Source: Hezbollah Training Shiite Fighters in Syria,” *Asbarq al-Awsat*, January 10, 2013.

22 Syrian opposition sources often report Hizb Allah “officers” with regime forces in combat. See, for example, a November 27, 2013, report by the Syrian Observatory for Human Rights (SOHR) on the presence of Hizb Allah “officers” with regime regular troops in combat in the Damascus area, available at www.facebook.com/syriahro. Hizb Allah forces are closely associated with the Iraqi irregulars fighting for the regime in Syria. See, for example, an SOHR report of November 23, 2013, on Hizb Allah forces cooperating with the Abu Fadl al-Abbas Brigade in the Otaiba area of rural Damascus, available at www.facebook.com/syriahro.

23 Corseting operations are military actions in which high quality troops or forces are deployed with lower quality units to improve their combat capabilities. The term derives from the assignment of German Afrika Korps units to bolster Italian units in the North Africa campaign. See Bryn Hammond, *El Alamein: The Battle that Turned the Tide of the Second World War* (New York: Osprey Publishing, 2012).

24 Smyth, “Does Hezbollah’s Partial Exit from Syria Mean Anything?”

- Direct combat operations on key battlefields, as seen in Qusayr.²⁵

All of these roles have been important to regime successes since at least June 2013. Hizb Allah has been involved in both joint²⁶ and combined²⁷ offensive and defensive operations. It participates in joint operations with regime heavy forces (armor and artillery), air force units, and surface-to-surface missile units.²⁸ Joint and combined operations are a standard approach; in combat operations, Hizb Allah forces are frequently seen and reported working with regime and allied forces.²⁹

Based largely on opposition reporting, Hizb Allah has been involved in direct combat and corseting operations in eight areas within Syria,³⁰ and in corseting and advisory operations in three more.³¹ Reports posted by Syrian opposition elements reveal more than 80 specific locations where Hizb Allah is said to have been involved in military actions.³²

25 Nicholas Blanford, "The Battle for Qusayr: How the Syrian Regime and Hizb Allah Tipped the Balance," *CTC Sentinel* 6:8 (2013).

26 Joint operations are those conducted by a combination of various armed services, including air, ground, and naval.

27 Combined operations are those conducted with the services of another, allied, country.

28 For example, as seen during the Qusayr campaign. See, for example, "Activists: Syrian Regime Provides Hezbollah Aerial Shield in Qusayr," *al-Arabiya*, April 21, 2013.

29 As seen during the fighting in the Qalamoun area. See, for example, Nicholas Blanford, "Slow Drip Offensive Underway in Qalamoun," *Daily Star*, October 25, 2013; Alex Simon and Mohammed Rabie, "Cross Border Sectarian Showdown: The Battle for Qalamoun," *Syria Direct*, November 26, 2013.

30 Specifically: the Qusayr campaign, the battle for Homs city, the battle for Tal Kalakah, fighting in the Aleppo city area and the Aleppo countryside, offensive and defensive operations in Damascus and its suburbs, and the Qalamoun operation.

31 Hizb Allah appeared to conduct corseting and advisory operations in Latakia, Deraa, and Idlib provinces.

32 Sources include the Syrian Observatory for Human Rights (SOHR) and the Syrian Local Coordinating Committees (LCC) Facebook pages (www.facebook.com/syriahro and www.facebook.com/LCCSy), and individual postings on the Yalla Souriya blog located at www.yal-lasouriya.wordpress.com.

Evaluating Hizb Allah's Success

Hizb Allah's combat performance in Syria has been at least fair. Its forces have the training and experience to conduct attacks and defensive actions with skill, and they have demonstrated a willingness to accept the casualties necessary to achieve their objectives.³³ Nevertheless, Hizb Allah's forces have not always proved successful in offensive actions, suffering some tactical setbacks in the fighting for Qusayr,³⁴ and may have failed in some defensive actions in the eastern Damascus suburbs during heavy fighting there in late November 2013.³⁵

The 2013 Qusayr campaign is a case in point. The Syrian regime's and Hizb Allah's operation to retake control of Qusayr began in April 2013,³⁶ and the assault on the city, which began on May 19, lasted 17 days,³⁷ even with regime and Hizb Allah forces having the advantage of firepower and the ability to isolate the city. Hizb Allah was apparently surprised by the level of resistance offered by the rebels,³⁸ the rebels' extensive use of mines and improvised explosive devices (IEDs),³⁹ and was unfamiliar with the area of operations.⁴⁰

The protracted nature of Hizb Allah's offensive operations, not only at Qusayr but also in the Damascus and Aleppo areas, may reflect concern about casualties, as well as interoperability issues⁴¹ involved in cooperating with regular and irregular regime and allied forces. Hizb Allah took significant

33 This assessment is based on their performance in the fighting at Qusayr in the spring and more recently in Qalamoun.

34 Blanford, "The Battle for Qusayr: How the Syrian Regime and Hizb Allah Tipped the Balance."

35 See, for example, "Eastern Al Ghota, 40 Hezbollah Mercenaries Have Surrendered to the Rebels Due to the Siege and the Shortage of Ammunitions," *Yalla Souriya* blog, November 24, 2013.

36 Blanford, "The Battle for Qusayr: How the Syrian Regime and Hizb Allah Tipped the Balance."

37 *Ibid*.

38 Jamie Dettmer, "Hezbollah Has Edge on Syrian Battlefield," *Voice of America*, June 25, 2013.

39 Tony Badran, "Hezbollah Slips in Qusayr," *Now*, May 23, 2013.

40 Nicholas Blanford, "Hezbollah Applies New Training in Syria," *Daily Star*, June 8, 2013.

41 Such as incompatible communications systems, different standards of training, different rules-of-engagement, different doctrine.

casualties in the Qusayr⁴² campaign and appeared to be suffering rising casualties in the fighting in the Damascus (southern and eastern Damascus, Qalamoun) region in November.⁴³ Hizb Allah is also losing combat leaders in the fighting, as would be expected in close quarters and urban combat.⁴⁴ Overall, Hizb Allah has probably suffered some hundreds killed in action⁴⁵ in Syria and, in a rough estimate, perhaps 1,000 wounded in action,⁴⁶ but losses could be greater. Nevertheless, these numbers seem manageable for Hizb Allah from a military perspective.⁴⁷ Syrian opposition sources claim the rebels are inflicting large casualties on Hizb Allah forces, but these claims need to be heavily discounted.⁴⁸

Not to be overlooked is Hizb Allah's train and assist mission that began in 2012.⁴⁹ In the training role, Hizb Allah has focused on small unit and counterinsurgency tactics for the

42 "Hezbollah Operatives Killed in Syria - Update," Meir Amit Intelligence and Terrorism Information Center, June 27, 2013.

43 Nicholas Blanford, "Battlefield Lessons in Syria Strengthen Hezbollah's Fighting Force," *Christian Science Monitor*, December 3, 2013. See also "19 Fighters Killed in 17 Days," available at www.youtube.com/watch?v=N2-dJcgO-Fg.

44 Blanford, "Battlefield Lessons in Syria Strengthen Hezbollah's Fighting Force"; "Hezbollah Operatives Killed in Syria - Updated to the End of July 2013," Meir Amit Intelligence and Terrorism Information Center, August 3, 2013.

45 Through July 2013, Hizb Allah is estimated to have lost 200 killed in Syria and several hundred wounded, mostly in the Qusayr campaign. See "Hezbollah Operatives Killed in Syria - Updated to the End of July 2013." Since July 2013, Hizb Allah has continued to suffer casualties in Syria.

46 This estimate is based on a standard factor of four WIA for every KIA. Also see Amos Harel, "Hardened in Syria War, Hezbollah Presents New Set of Threats," *Haaretz*, November 13, 2013.

47 Politically is another matter. See, for example, Zaid Bin Kami, "Hezbollah Fighters' Families Unhappy About Syria Involvement," *Asharq al-Awsat*, July 7, 2013; Ariel Ben Solomon, "Dissent within Hezbollah over Involvement in Syria," *Jerusalem Post*, April 18, 2013.

48 See, for example, Stuart Winer, "250 Hezbollah Fighters Slain in Damascus, Rebels Claim," *Times of Israel*, November 28, 2013.

49 "Hezbollah Involvement in the Syrian Civil War," Meir Amit Intelligence and Terrorism Information Center, June 17, 2013, pp. 14-15.

Syrian regular army.⁵⁰ By the spring of 2013, Hizb Allah had helped train 50,000 members of the regime's irregular forces, according to an Israeli estimate.⁵¹ Hizb Allah has made the regime's regulars more effective, and made the irregulars useful, even crucial, for regime survival by helping to compensate for attrition of regular forces. In April 2013, according to a Lebanese newspaper, Syrian President Bashar al-Assad recognized Hizb Allah's contribution to the preservation of the regime, reportedly expressing his "confidence, satisfaction and great gratitude towards Hezbollah."⁵²

Hizb Allah is making a difference in Syria, but not everywhere and not yet decisively. Its forces have become the regime's "fire brigade," employed in critical areas and actions. It has helped to keep the regime in the war, and arguably it has helped reverse the course of the conflict. It has restored the regime's ability to conduct significant offensive operations, and has been instrumental to regime successes in Homs Province, Aleppo Province and Damascus and its suburbs.

Military Challenges of the Syrian War

The military environment in Syria presents serious challenges to Hizb Allah. One of the group's strengths in southern Lebanon has always been its intimate understanding of the terrain. Hizb Allah personnel may have had some familiarity with the terrain on the Syrian side of the border, but beyond a few miles they would have had little knowledge, and in the depth of Syria, where they now find themselves operating, they have effectively no knowledge. Although they are now gaining familiarity in the areas in which they are deployed, this process takes time, and each movement into a new area requires learning. The terrain in Syria is also militarily undeveloped, unlike southern Lebanon where Hizb Allah has created an elaborate military infrastructure of fortifications, obstacles, demolitions, command

facilities, observation posts, storage facilities, and barracks, comprising hundreds of positions.⁵³

Hizb Allah personnel are involved in both urban and rural fighting over long distances and on multiple fronts. The distances involved and the size and complexity of the urban environments in Syria are unprecedented for the organization. Hizb Allah's previous major ground combat experience was limited mostly to a relatively small area of southern Lebanon adjacent to the Israeli border. It is now fighting on three or four different fronts separated by tens, and, in the case of the Aleppo front, hundreds of miles. Its urban combat experience was largely limited to the towns and villages of southern Lebanon, while in Syria it is involved in close combat in the sprawling neighborhoods of major cities such as Damascus, Homs and Aleppo.

The human terrain, or the sectarian map, of the Syrian theater is more complex than Hizb Allah faces in southern Lebanon, the latter of which has a strong Shi'a majority. Unlike in its previous conflicts with Israel, Hizb Allah is operating in some areas that have a hostile Sunni population that supports its opponents. In these areas, Hizb Allah is the "occupier" and faces armed "resistance."

Moreover, the Sunni rebels in Syria are not the enemy who Hizb Allah planned to fight. Hizb Allah's careful study of the Israel Defense Forces (IDF) and meticulous preparation for fighting it avail Hizb Allah little against the rebels in Syria. These opponents are diverse irregulars with little in the way of formal organization, heavy forces, and established doctrine. In some ways, they are like Hizb Allah itself, with a strong ideological foundation and a deep commitment to their mission.

Additionally, unlike Lebanon, Hizb Allah in Syria is involved in complex coalition warfare including joint and combined operations. The nature of the war being fought by the regime demands that Hizb Allah work with forces as different as those of the

regime's air force and the irregular Iraqi volunteers such as the Abu Fadl al-Abbas Brigade.⁵⁴

In terms of challenges in Syria, Hizb Allah is conducting operations (including offensive ones), and not just fighting tactical battles.⁵⁵ This is warfare of a different kind than it has waged against the IDF, involving larger formations, longer periods of time, in more complex maneuvers, and placing more demands—in terms of planning and command and control—on the combat forces and on supporting elements (especially intelligence and logistics). All of this is certainly a challenge to Hizb Allah's command and control capabilities, which were built for an almost "set-piece" battle with the well-understood IDF.⁵⁶

Implications

Hizb Allah is a learning organization. It studies its opponents and draws conclusions from its combat operations.⁵⁷ Lessons it may have learned, re-learned, or had emphasized in the Syrian conflict likely involve:

- The role of firepower in offensive and defensive operations, including its application, coordination, and effects;
- The requirements of conducting sustained combat operations over a broad area in terms of planning, command and control, logistics, rotation of forces and personnel;

54 The Syrian air force provided air support to operations in which Hizb Allah was involved at Qusayr, Damascus, and Aleppo, and Hizb Allah forces have been closely associated with the operations and actions of the Abu Fadal al-Abbas Brigade. On the latter point, see Phillip Smyth, "Hizballah Cavalcade: What is the Liwa'a Abu Fadl al-Abbas (LAFa)?" Jihadology.net, May 15, 2013.

55 The operational level of war is the level between strategy and tactics. It involves the use of maneuver and battle to achieve strategic goals in a theater or sub-theater of war. Operations implement strategy. The fighting in the Qusayr area of Syria that began in April 2013 and culminated with the capture of Qusayr city in early June was an operation involving multiple battles. Battles are the realm of tactics.

56 For a discussion of Hizb Allah's preparations for war with Israel, see Jeffrey White, "If War Comes: Israel vs. Hizballah and Its Allies," The Washington Institute for Near East Policy, September 2010.

57 Anthony Cordesman, "Lessons of the 2006 Israeli-Hezbollah War," Center for Strategic and International Studies, 2007, p. 32.

50 Ibid., p. 1.

51 Julian Borger, "Iran and Hezbollah 'Have Built 50,000-Strong Force to Help Syrian Regime,'" *Guardian*, March 14, 2013.

52 "Assad Says Hezbollah a Model for Syria," *Now*, May 9, 2013.

53 "Hizballah Located in 1,000 Facilities in Southern Lebanon," Israel Ministry of Foreign Affairs, March 31, 2011.

- The complexities and challenges of working with allied regular and irregular forces;
- The high cost of offensive operations in manpower and resources;
- The conduct of company/battalion size offensive operations;
- The planning and conduct of complex operations.

Hizb Allah is gaining command and control experience at the operational and tactical levels. It is raising a new crop of fighters and leaders with combat experience.⁵⁸ It is hardening its personnel and units for the rigors of combat, likely increasing their cohesion and resilience. It is improving individual and small unit weapons and tactical skills. It is gaining experience in the collection and use of tactical and operational intelligence.⁵⁹ As a result of its involvement in Syria, Hizb Allah will be better prepared to fight in Lebanon. With an improved understanding of the strengths and weaknesses of Sunni irregular forces and increased experience in combat, its superiority over potential opponents in Lebanon, including the Lebanese Armed Forces, will be enhanced.

Nevertheless, Hizb Allah is also incurring costs from its Syria intervention. In addition to casualties, it has become the target of Sunni elements operating in Lebanon, which have penetrated to the very heart of the organization in southern Beirut.⁶⁰ Its participation in the conflict has contributed to rising Sunni-Shi'a tensions in Lebanon.⁶¹ Once the darling of the Arab world, Hizb Allah is now seen, in at least some quarters, as an enemy of Sunnis.⁶²

58 Blanford, "Battlefield Lessons in Syria Strengthen Hezbollah's Fighting Force."

59 Amos Harel, "Hardened in Syria War, Hezbollah Presents New Set of Threats," *Haaretz*, November 13, 2013.

60 Ben Hubbard and Hwaida Saad, "Deadly Blast Rocks a Hezbollah Stronghold in Lebanon," *New York Times*, August 15, 2013.

61 Hwaida Saad and Ben Hubbard, "Bombings Strike Lebanon, as Mosques are Targeted in Growing Violence," *New York Times*, August 23, 2013.

62 Jeffrey Fleishman, "Hezbollah's Role in Syria Fighting Threatens to Spread Holy War," *Los Angeles Times*,

The fighting in Syria should improve Hizb Allah's ability to fight the IDF, but the improvement will be limited, and some of what Hizb Allah learns in Syria will be irrelevant to fighting the IDF. In the fighting in Syria, Hizb Allah enjoys significant advantages over the rebels, including: regime firepower, a secure base area, extensive logistics, robust command and control, and the opportunity for operational maneuver. In a war with Israel, these advantages would be with the IDF. Nevertheless, some improvement in combat performance and coordination of forces should be expected, including a capability for offensive actions at the company level.

Yet, it is in Syria where Hizb Allah's role has the greatest military and political implications. Hizb Allah's intervention has been instrumental in preserving the regime. It is probably the best force on the battlefield at this stage of the Syrian war. It has proven itself a reliable and effective ally. It is willing to accept the political risks and the casualties of a prolonged and essentially open ended intervention.

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Is AQAP to Blame for the String of Assassinations in Yemen?

By Casey L. Coombs and Hannah Poppy

IN THE LAST two weeks of September 2013, al-Qa`ida in the Arabian Peninsula (AQAP) executed a series of complex attacks on Yemeni army installations. AQAP claimed responsibility for the operations in a stream of online media releases, one of which pictured al-Qa`ida's *amir* of Abyan Province, Jalal Muhsin Balidi al-Murqoshi (also known as Abu Hamza), warning special forces soldiers captured in the raids against cooperating with the U.S.-backed counterterrorism alliance in Sana'a.¹ "There is no issue between the soldiers and us, except when they have made themselves armors for this oppressive lackey government," al-Murqoshi said. "This soldier is the one who has lured himself into a protecting vest for the *tawaghit* (tyrants)."

In these detailed propaganda messages, however, AQAP never claimed direct responsibility for the growing number of assassinations targeting Yemeni military and security officials since interim President Abd Rabu Mansur Hadi took office in early 2012 and crushed al-Qa`ida's nascent governance project in Abyan Province and neighboring Shabwa Province. Nonetheless, and despite the lack of government evidence identifying the assassins, international media and state news coverage have broadly cast the hit-and-run tactics as the work of AQAP.² This narrative fails to account for historical patterns of political violence between the central government and armed factions in areas where today's assassinations are occurring and overlooks the potential for violence in Yemen's highly contested political transition currently underway.

1 "Al-Malahim Media Presents a New Video Message from al-Qa'idah in the Arabian Peninsula: 'Repelling the Transgressor #2,'" *Jihadology.net*, October 16, 2013.

2 "Yemen Jihadists Unleash Wave of Killings," *United Press International*, November 1, 2012; "Yemen: Counterterrorism Forces Raided an al-Qaeda Hideout," *Embassy of the Republic of Yemen, Washington, D.C.*, January 13, 2013.

With these considerations in mind, this article examines a dataset of 117 reported assassinations from June 2012,³ when the U.S.-Yemeni partnership uprooted AQAP's Islamic emirates, to December 15, 2013.⁴ It identifies a number of assassination trends, and then cautions against assigning blanket responsibility to AQAP. It finds a more contextualized picture of the assassination campaign and highlights the potential risks of focusing too closely on AQAP in the complex dynamic unfolding on the ground.

Taxonomy of Assassinations

On the morning of September 24, 2013, a gunman on a motorcycle killed Yemeni Colonel Ali al-Dulaimi while he was on his way to work.⁵ The assailant, who according to some reports used a weapon fixed with a silencer, made a swift escape. His victim was the head of finance at the city's military hospital. No one claimed responsibility for the killing. Like the murder of al-Dulaimi, 93 percent of the 73 assassinations recorded in the dataset for 2013 involved firearms, most frequently employed by militants on motorbikes.⁶ Since June 2012, the monthly total of assassinations ranged from two to 14, with September and October 2013 recording the highest number.⁷ The geographical spread of these attacks shifted sharply from 2012, when the majority occurred in Sana'a, to the last few months of 2012 and into 2013 when southern Hadramawt Province was the

most affected.⁸ A wider deterioration in security in Hadramawt, coupled with crackdowns on unregistered motorbikes and weapons in Sana'a,⁹ likely contributed to this geographical shift.¹⁰

Another notable trend was the diminishing role of bombs, which accounted for 25% of the 50 assassinations in 2012.¹¹ Given that the highest profile assassinations in the last two years were bombings,¹² which terrorist groups often use against high-value and hard-to-reach targets,¹³ the trend of more armed attacks and fewer bombings may be a reflection of the status of the targets, who have more frequently been middle-ranking officials.¹⁴ Several other scenarios could explain this increased reliance on firearm attacks, such as decreasing capacity of existing assailants to make and plant bombs, or new assailants who lack bomb-making skills. There is no evidence, however, to confirm any of these possible explanations.

Data from news coverage of the attacks and anecdotal reports indicate that assailants are probably conducting fairly extensive surveillance of their victims. Almost 40% of those targeted in 2013 were on their way to, or from work, while others died as they were eating in restaurants, or leaving Friday

prayers.¹⁵ Given that security forces have experienced previous periods of assassinations, such as the AQAP insurgency in 2010, the patterns seem to demonstrate relatively poor levels of personal security, suggesting that they have not adapted to this phenomenon.¹⁶

Who is Responsible?

AQAP laid claim to a similar targeted insurgency on the state in 2010, which AQAP analyst Gregory Johnson dubbed the "year of the motorbike assassination."¹⁷ Johnsen noted a similar shift in attack methodology to that seen since 2012: from a bomb-centric approach to an increasing reliance on motorcycle gunmen. Now, as in 2010, in Johnson's words, "this less technically skilled approach... is reaping more dead officers."¹⁸ This suggests that the assassination trend is not a new phenomenon and is instead history repeating itself.

Indeed, similar to the 2012-2013 period, the 2010 spate of motorcycle assassinations coincided with intense U.S.-Yemeni counterterrorism operations. Yet also like today, the 2010 assassinations took place amidst rising political tensions. At the time, these tensions were between armed forces and intelligence personnel affiliated with the northern-based regime and a spreading opposition movement, known as Hiraak.¹⁹ Much of the vigilantism

8 Ibid.

9 The Yemeni government made repeated attempts to crack down on unregistered motorcycles in Sana'a, before finally instituting an indefinite ban on all motorcycles in the capital starting December 1, 2013.

10 "Yemen Bans Motorbikes in Sanaa Because of Attacks," Agence France-Presse, December 1, 2013; Mohammed bin Sallam, "Motorcycle Assassinations Prompt Crack Down By Reconciliation Government," *Yemen Times*, November 14, 2012.

11 This data is from www.terrorismtracker.com, a subscription-based site designed by The Risk Advisory Group.

12 On June 18, 2012, a suicide bomber killed General Ali Salem Qatn, who commanded military operations to reclaim Abyan. See Laura Kasinof, "Yemeni Commander Killed in Suicide Bombing," *New York Times*, June 18, 2012.

13 Mia M. Bloom, *Dying to Kill: The Global Phenomenon of Suicide Terror* (New York: Columbia University Press, 2005).

14 This data is from www.terrorismtracker.com, a subscription-based site designed by The Risk Advisory Group.

3 See Yasser al-Yafei, "Assassinations in South Yemen: Al-Qaeda or Settling Scores?" *al-Akbar*, January 5, 2012, for a discussion of sporadic assassinations in southern provinces reported during the 2011 Arab Spring revolts.

4 For the purposes of this article, "assassination" is defined as "the targeted killing of a high profile individual for political or ideological motives, on the basis of their individual identity and/or status or occupational function." Incidents are only recorded when they can be verified by at least three different sources; therefore, the actual number of assassinations is likely higher. All data is from www.terrorismtracker.com, a subscription-based site designed by The Risk Advisory Group.

5 "Martyrdom of Colonel Ali al-Dailami Shot Dead by Gunmen on a Motorcycle in Front of the Military Hospital," Sept26.net, September 24, 2013.

6 This data is from www.terrorismtracker.com, a subscription-based site designed by The Risk Advisory Group.

7 Ibid.

15 Ibid.

16 The pattern of attacks suggests that neither military officials (including those accompanied by guards) nor intelligence officers are varying their routes to and from work. Informal off-the-record conversations with high-level members of the security forces also suggest that they have made little effort to keep the nature of their work secret.

17 Gregory Johnsen, "The Year of the Motorbike Assassination," *Waq al-Waq*, October 13, 2010. Also see Gabriel Koehler-Derrick ed., *A False Foundation? AQAP, Tribes, and Ungoverned Spaces in Yemen* (West Point, NY: Combating Terrorism Center, 2011).

18 Johnsen.

19 Hiraak formed in 2007 as a loose federation of aggrieved factions seeking reparations for two decades of subjugation since Salih's former Yemen Arab Republic (YAR) in Sana'a defeated the Aden-based People's Democratic Republic of Yemen (PDY) in a 1994 civil war and forcibly joined the politics. Scholar Sarah Phillips identified "the grand corruption and exclusion of most groups from access to public resources" as "the key drivers for possible political violence in Yemen." See Sarah Phillips

and political violence against northern security officials reported in 2010 was attributed to Hiraaki elements,²⁰ although some Hiraaki leaders argued that the killings were false flag operations carried out by pro-government militias to discredit the separatist movement.²¹ The absence of claims of responsibility and public investigations into the killings have only perpetuated unknowns and conspiracy theories.

While Yemen's internationally-monitored political transition has restored public confidence through military restructuring decrees and the convening of an inclusive National Dialogue Conference (NDC), the situation remains in many ways unchanged today. AQAP continues to promote the killing of Yemeni military and security forces, although the group has yet to claim any of the motorbike assassinations, and the Yemeni government has provided no evidence tying AQAP to the murders—even though it continues to lay blame on the group for the killings. This atmosphere has bred conspiracies, particularly among southern separatists, that northerners are either responsible for some assassinations of southern security officials, or are in cahoots with AQAP toward the same end.²² Ex-President Ali Salih and his longtime ally General Ali Mohsin al-Ahmar, considered Yemen's two most powerful actors for decades, are the highest profile if not likeliest suspects.²³

et al., "Understanding the Routes In and Out of Political Violence: An Assessment of the Linkages Between Identity, Politics, Exclusion, Inequality and Political Violence in EMAD Countries," Governance and Social Development Resource Centre, September 2006.

²⁰ Mohammed al-Qadhi, "Killings Deepen Yemeni Rift," *The National*, July 22, 2009; Mohammed al-Qadhi, "Yemeni Government and Secessionists Trade Blame for Deaths," *The National*, December 4, 2009.

²¹ Al-Qadhi, "Yemeni Government and Secessionists Trade Blame for Deaths." For a detailed discussion of pro-government militias, see "In the Name of Unity: The Yemeni Government's Brutal Response to Southern Movement Protests," Human Rights Watch, 2009.

²² Ali Ibrahim al-Moshki, "Eight Yemeni Soldiers Arrested on Suspicion of Conspiring with Militants," *Yemen Times*, November 14, 2013.

²³ This is especially the case after Ali Mohsin defected from the Salih regime early in the 2011 Arab Spring uprisings and drastically altered the balance of power. See "Yemen Plagued by Assassinations," *al-Monitor*, October

The fact that the majority of assassinations are occurring in southern Hadramawt is probably aggravating this perception.²⁴ As argued by one Yemeni political analyst, "The assassinations are not random. They are part of a plan. It's not just one party; al-Qa`ida are there, but Sana`a-based parties are also heavily involved."²⁵

While it remains unclear who is behind the assassinations, the effects of the campaign appear more palpable. According to an official in the Yemeni Ministry of Defense, "people who have information about the relationship between al-Qa`ida and the old regime are scared to talk now. The assassination campaign has heightened their fears. That's the goal of it."²⁶ According to a southern political leader participating in NDC talks, Yemeni factions are fighting the equivalent of a civil war "under the shade of security chaos."²⁷ Others commonly frame the motorbike assassinations as a way to undermine President Hadi's transitional government and underscore the relative stability offered by the former regime.²⁸

Conclusion: Reactionary Risks

Blanket attribution of the attacks to AQAP not only glosses over a complex landscape of actors, but reinforces perceptions of the threat the organization poses.²⁹ It also affords a degree of deniability for those implicated in the killing of so many Yemenis. This ambiguity—and hence reluctance to claim responsibility for assassinations—may also minimize the potential backlash against assailants from the

18, 2013.

²⁴ See Andrew Michaels and Sakhr Ayyash, "AQAP's Resilience in Yemen," *CTC Sentinel* 6:9 (2013). AQAP's rise coincided with Hiraak's. Also see Iona Craig, "Yemeni Politics Complicates US Counterterrorism Efforts," *al-Jazira*, October 3, 2013.

²⁵ Peter Salisbury, "Yemen's 'Hidden Wars' Threaten Peace Process," *al-Jazira*, December 3, 2013.

²⁶ Personal interview, Yemeni Ministry of Defense official, Sana`a, Yemen, November 2013.

²⁷ Personal interview, Hiraaki leader, Aden, Yemen, December 2012.

²⁸ Ali Ibrahim al-Moshki, "Targeting Officials: Assassination Toll Casts Shadow on Yemen," *Yemen Times*, November 19, 2013.

²⁹ Personal interview, Yemeni Ministry of Defense official, November 2013; personal interview, Yemeni scholar, January 2013.

general population, and perhaps more importantly avert tribal vendettas in the southern provinces where AQAP has sought refuge.³⁰ Indeed, one of the keys to AQAP's resiliency in Yemen has been the group's ability to coexist with populations on the margins of the central government's patronage networks.

Attributing the attacks to AQAP without evidence could prove even more detrimental. Such assumptions free the central government's hand to carry out reactionary operations in areas where such heavy-handed tactics form some of the roots of secessionist fervor. These concerns were illustrated in early December 2013 when Yemeni soldiers shot dead a well-respected Hadrami tribal shaykh and several of his guards, who the Ministry of Defense initially reported were al-Qa`ida militants.³¹ The claim was rescinded hours later, but did little to assuage local ire encapsulated in a December 10 statement from the Hadramawt Tribes Alliance demanding the withdrawal of corrupt Yemeni military and security forces.³² Multiple rounds of negotiations have faltered and bloody battles have continued between state forces and the tribal alliance.³³ As long as these brazen assassinations continue, political violence could soon overtake the political process in Yemen.

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³⁰ Scott Atran, "Moral Imperatives and Democratic Dynamics in the Fight Against AQAP in the Context of the Arab Spring: Research and Policy Challenges," Report for the National Security Initiative and Department of Defense, August 2011, pp. 34-35.

³¹ Haykal Bafana, "Hadhramaut and South Arabia: Hadhramaut In A State Of Flux," Haykal Bafana blog, December 19, 2013; "Tribesmen in Hadramout Blow Up Oil Piping, Strikes in Mukalla Continue," *Yemen Times*, January 7, 2014.

³² *Ibid.*

³³ "Tribesmen Kill 4 Yemen Troops in New Assault," *Gulf Times*, January 12, 2014.

Recent Highlights in Political Violence

November 1, 2013 (PAKISTAN): A U.S. drone strike killed Hakimullah Mehsud, the leader of Tehrik-i-Taliban Pakistan (TTP), in North Waziristan Agency of the Federally Administered Tribal Areas. – CBS/AP, November 1; AP, November 2

November 2, 2013 (MALI): Gunmen abducted and subsequently killed two French radio journalists in northern Mali. Al-Qa`ida in the Islamic Maghreb claimed responsibility. – Fox News, November 3; Daily Mail, November 2

November 3, 2013 (IRAQ): A suicide bomber detonated an explosives-laden vehicle outside the headquarters of a police battalion in Ba`quba, Diyala Province. A second suicide bomber also blew himself up, while a third suicide bomber managed to enter the compound and detonate his explosives at the entrance to the main building. The blasts killed three policemen. – AFP, November 3

November 3, 2013 (IRAQ): A suicide bomber in an explosives-laden vehicle killed two policemen at a checkpoint in Tal Afar, Ninawa Province. – AFP, November 3

November 3, 2013 (YEMEN): A car bomb seriously wounded a Yemeni intelligence officer in Aden. There was no immediate claim of responsibility. – AFP, November 3

November 3, 2013 (LIBYA): A car bomb killed a Libyan intelligence officer and his two-year-old son in Benghazi. – Daily Star, November 4

November 5, 2013 (AFGHANISTAN): A suicide bomber in an explosives-laden vehicle killed a British soldier east of Lashkar Gah in Helmand Province. – AP, November 5

November 6, 2013 (IRAQ): A suicide bomber detonated an explosives-laden oil tanker at a police station in Muqdadhiyya, Diyala Province, killing five policemen. – AFP, November 6

November 7, 2013 (IRAQ): Gunmen entered the home of the leader of a local Awakening Council in Tikrit, killing him and five of his family members as they slept. – CNN, November 7

November 7, 2013 (IRAQ): A suicide bomber in a vehicle targeted the main entrance to a military base in Tarmiyya, 55 miles north of Baghdad. After the explosion, a suicide bomber on foot entered the base and detonated his explosives. The bombs killed at least 16 people. – CNN, November 7

November 7, 2013 (PAKISTAN): Tehrik-i-Taliban Pakistan (TTP) elected Maulana Fazlullah as their new leader after the death of Hakimullah Mehsud in a U.S. drone strike on November 1. Fazlullah, considered a hardliner, was the head of the TTP's Swat faction. – al-Jazeera, November 7; New York Times, November 7

November 7, 2013 (YEMEN): Two suspected U.S. drone strikes killed five alleged al-Qa`ida in the Arabian Peninsula fighters in Abyan Province. – AP, November 8

November 8, 2013 (GLOBAL): Al-Qa`ida chief Ayman al-Zawahiri released a new audio message ordering the abolishment of the Islamic State of Iraq and the Levant (ISIL). Al-Zawahiri said that Jabhat al-Nusra is the only al-Qa`ida representative fighting in Syria. The al-Qa`ida chief said that the leader of the Islamic State of Iraq (ISI), Abu Bakr al-Baghdadi, "made a mistake" by creating the ISIL without al-Zawahiri's permission. Al-Baghdadi continues to defy al-Zawahiri's orders and still operates in Syria. – RFE/RL, November 8; AFP, November 8

November 8, 2013 (SOMALIA): A suspected car bomb exploded outside the popular Hotel Maka in Mogadishu, killing at least six people. – Reuters, November 8

November 10, 2013 (IRAQ): A suicide bomber detonated explosives in a line of Iraqi recruits waiting to enlist in the second army division in Mosul, Ninawa Province. The blast killed six people. – al-Jazeera, November 10

November 10, 2013 (PAKISTAN): Nasiruddin Haqqani, a senior leader in the al-Qa`ida-linked Haqqani network, was shot to death by armed men riding a motorcycle on the outskirts of Islamabad. Nasiruddin was considered a key financier and emissary for the network. No one claimed responsibility for his killing. – AP, November 12; AP, November 11

November 11, 2013 (UNITED STATES): The U.S. government announced that a North Carolina man faces federal charges for attempting to join Jabhat al-Nusra, an al-Qa`ida-linked militant group fighting in Syria. The 29-year-old native of Pakistan, Basit Javed Sheikh, was arrested before boarding a flight to Lebanon on November 2. – AP, November 11; Mail Online, November 12

November 12, 2013 (FRANCE): French authorities arrested four men in the Paris region on charges of belonging to a jihadist network sending fighters to Syria. Three of the men were born in France, while one was born in Morocco. Agence France-Presse quoted an "informed source" who said that an estimated 440 people from France were either currently fighting in the Syrian conflict, planning to go and fight, or had already returned. – AFP, November 15

November 12, 2013 (AUSTRALIA): New video emerged showing a man claiming to be Australia's first suicide bomber before he reportedly conducted an attack for Jabhat al-Nusra in Syria. – Radio Australia, November 12

November 13, 2013 (GLOBAL): The U.S. State Department designated the Nigerian militant groups Boko Haram and Ansaru as foreign terrorist organizations. – UPI, November 13

November 14, 2013 (IRAQ): A suicide bomber dressed in a police uniform killed 32 people in a Shi'a-majority area of Diyala Province. – AFP, November 14

November 16, 2013 (AFGHANISTAN): A suicide bomber detonated an explosives-laden vehicle near a camp where Afghan tribal leaders are scheduled to meet next week to discuss a security agreement with the United States. The explosion killed 13 people. – Wall Street Journal, November 17; UPI, November 16

November 16, 2013 (RUSSIA): Russian police killed five suspected militants, including the alleged mastermind of the October 21 suicide bombing of a bus in Volgograd, in the village of Semender. – RFE/RL, November 16

November 18, 2013 (ISRAEL): Court documents filed by Israel's Justice Ministry revealed that the country has been holding suspected al-Qa`ida

operative Samir al-Baraq for the past three years. Al-Baraq is allegedly an expert in biological warfare. He was arrested while trying to cross into Israel from Jordan in 2010. – *Voice of America, November 18*

November 19, 2013 (LEBANON): Two suicide bombers exploded outside the Iranian Embassy in Beirut, killing at least 23 people. The Abdullah Azzam Brigades, which is linked to al-Qa`ida, claimed responsibility for the attack. The group's statement of responsibility said that "the operations in Lebanon will continue until two demands are met. The first is that Iran's party [Hizb Allah] withdraws from Syria. The second is the release of our prisoners from Lebanon's unjust jails." – *AFP, November 19*

November 19, 2013 (SOMALIA): Fighters from al-Shabab attacked a police station in Beledweyne, killing at least 16 people. A suicide bomber in a vehicle blasted open an entrance to the compound, and then militants entered on foot spraying gunfire. – *AFP, November 19*

November 19, 2013 (YEMEN): A suspected U.S. drone strike killed three alleged militants belonging to al-Qa`ida in the Arabian Peninsula in Hadramawt Province. – *al-Jazira, November 19*

November 20, 2013 (EGYPT): A suicide bomber rammed an explosives-laden vehicle into one of two buses carrying off-duty Egyptian soldiers in northern Sinai, killing 10 people. – *AP, November 20*

November 20, 2013 (PAKISTAN): A suicide bomber rammed an explosives-laden vehicle into a checkpoint in North Waziristan Agency of the Federally Administered Tribal Areas, killing at least two Pakistani security personnel. – *Dawn, November 20*

November 21, 2013 (IRAQ): A car bomb, hidden in a truck of vegetables, exploded in a crowded food market in Saadiya, Diyala Province, killing at least 30 people. – *RTTNews, November 21*

November 21, 2013 (PAKISTAN): A suspected U.S. drone strike killed a senior member of the Haqqani network in Hangu District of Khyber Pakhtunkhwa Province. – *Reuters, November 21*

November 22, 2013 (PAKISTAN): Two bombs tore through a busy street in Karachi, killing at least seven people. Tehrik-i-Taliban Pakistan claimed responsibility. – *Dawn, November 23; The News International, November 23*

November 23, 2013 (IRAQ): A car bomb, followed by a suicide bomber, killed at least nine people in a busy market near a Shi`a mosque in Tuz Khurmato, Salah al-Din Province. – *Reuters, November 23*

November 23, 2013 (IRAQ): A suicide bomber in a vehicle targeted a security checkpoint at an outdoor market in Tal Afar, Ninawa Province, killing at least five people. – *CNN, November 23*

November 26, 2013 (IRAQ): A suicide bomber killed at least seven soldiers at the entrance to an army base in Tarmiyya, north of Baghdad. – *AFP, November 26*

November 26, 2013 (SYRIA): A suicide bomber detonated a vehicle at a bus stop west of Damascus, killing at least 15 people. – *Daily Star, November 26*

November 27, 2013 (TURKEY): A Turkish Interior Ministry report said that approximately 500 Turks have crossed the border into Syria to fight with al-Qa`ida-linked jihadists of Jabhat al-Nusra and the Islamic State of Iraq and the Levant. – *Dawn, November 28*

November 28, 2013 (IRAQ): A series of car bombs exploded in a five minute period across Iraq, killing at least 30 people. – *RFE/RL, November 28*

November 29, 2013 (IRAQ): Iraqi authorities discovered the bodies of 18 men—including four policemen, an army major and two tribal chiefs—in farmland near Tarmiyya, north of Baghdad. All of the men had been shot in the head and chest. Similar incidents of violence occurred throughout Iraq, including in Salah al-Din Province where authorities found seven men with their throats slit. – *AFP, November 29*

November 29, 2013 (AFGHANISTAN): A suicide bomber who concealed explosives in his turban injured an Afghan lawmaker for Zabul Province in Kabul. – *RFE/RL, November 29*

November 29, 2013 (PAKISTAN): A suspected U.S. drone strike killed one militant in North Waziristan Agency of the Federally Administered Tribal Areas. – *Voice of America, November 29*

December 1, 2013 (IRAQ): A suicide bomber detonated explosives at a funeral in Muqdadhiyya, Diyala Province, killing at least 10 people. – *BBC, December 1*

December 2, 2013 (AFGHANISTAN): A suicide bomber detonated an explosives-laden vehicle in front of a government office in Wardak Province, killing four Afghans. – *CNN, December 2*

December 2, 2013 (TURKEY): A Turkish newspaper reported that Turkey deported 1,100 European nationals who allegedly planned to cross the border this year to join al-Qa`ida-linked groups in Syria. – *UPI, December 2*

December 2, 2013 (NIGERIA): Boko Haram fighters attacked military and police facilities on the outskirts of Maiduguri. On December 12, Boko Haram leader Abubakar Shekau claimed responsibility for the attack, and he also warned that his group will attack the United States. – *Voice of America, December 2; Voice of America, December 12*

December 3, 2013 (AUSTRALIA): Authorities arrested two Sydney men on foreign incursion charges. One of the men was allegedly recruiting fighters for Syria and facilitating their travel, while the second man was preparing to travel to Syria. Authorities argued that the recruiter had already helped at least six other Australians travel to Syria to fight. – *Australian, December 3*

December 3, 2013 (IRAQ): A suicide bomber and a mortar attack on a government compound killed 10 people in Tarmiyya. – *BBC, December 3*

December 3, 2013 (SYRIA): A suicide bomber detonated explosives in central Damascus, killing four people. – *CNN, December 3*

December 3, 2013 (SOMALIA): Suspected al-Shabab militants attacked Somalia's Intelligence and National Security Agency base in Mogadishu with anti-aircraft weapons and rocket-propelled grenades. – *Garowe Online, December 4*

December 5, 2013 (YEMEN): A suicide bomber detonated an explosives-laden vehicle at the gate to the Yemeni Defense Ministry. Gunmen in a separate vehicle entered the facility and opened fire on soldiers, doctors and nurses working at a hospital inside. Approximately 52 people were killed. According to Reuters, it marked Yemen's "worst militant assault in 18 months." Al-Qa`ida in the Arabian Peninsula (AQAP) claimed responsibility. On December 21, however, an AQAP senior leader apologized for the attack, saying that one of their fighters disobeyed orders and attacked the hospital attached to the Defense Ministry. – *Reuters, December 5; Voice of America, December 6*

December 5, 2013 (LIBYA): American schoolteacher Ronnie Smith was killed by unidentified gunmen while jogging in Benghazi. Smith worked at an English-language school in the city. – *Los Angeles Times, December 5*

December 6, 2013 (SOMALIA): A car bomb killed a Somali member of parliament outside the prime minister's office in Mogadishu. – *AFP, December 6*

December 7, 2013 (IRAQ): Gunmen shot to death nine people at liquor stores in Baghdad. – *AFP, December 7*

December 10, 2013 (IRAQ): A suicide bomber killed 11 people at a Shi`a Muslim funeral in Ba`quba, Diyala Province. – *Reuters, December 10*

December 11, 2013 (AFGHANISTAN): A suicide bomber detonated an explosives-laden vehicle near a NATO convoy entering Kabul airport. There were no casualties. The Afghan Taliban claimed responsibility. – *AFP, December 11*

December 12, 2013 (KENYA): An unknown assailant threw a hand grenade at a van carrying British tourists in Mombasa. The grenade hit the window of the vehicle, but it failed to explode. – *AP, December 12*

December 12, 2013 (EGYPT): A car bomb exploded outside a central security forces camp in the Suez Canal city of Ismailia, killing one person. – *Abram Online, December 12*

December 12, 2013 (PAKISTAN): A roadside bomb exploded next to a Pakistani military convoy in North Waziristan Agency of the Federally

Administered Tribal Areas. Four soldiers were killed. Ansar al-Mujahidin claimed responsibility, saying it was in retaliation for a recent U.S. drone strike in Hangu District. – *AFP, December 12*

December 12, 2013 (YEMEN): A suspected U.S. drone strike killed at least 15 people in Bayda Province. Yemeni locals said that the missiles hit a convoy of vehicles traveling to a wedding party and that the dead were all civilians. Yemeni officials, who did not specify who conducted the airstrike, later said that the targets of the strike were senior al-Qa`ida leaders whose van hid in a civilian convoy. – *AP, December 12; AP, December 14; Voice of America, December 14*

December 13, 2013 (UNITED STATES): U.S. authorities arrested Terry Lee Loewen, of Kansas, for attempting to detonate a car bomb at Wichita Mid-Continent Airport. Loewen's arrest was part of an FBI undercover investigation, and the "bomb" used by the defendant was inert. Authorities allege that Loewen, who worked at the airport, cited Usama bin Ladin and Anwar al-`Awlaqi as his inspirations. – *Time Magazine, December 13; Telegraph, December 13*

December 13, 2013 (IRAQ): Twenty-five suspects held on terrorism charges escaped from a prison north of Baghdad. Some of the men faced the death penalty. Two Iraqi guards were killed during the escape. – *New York Times, December 13*

December 13, 2013 (IRAQ): Gunmen surrounded a bus of Iranian oil workers and opened fire, killing 16 Iranians and three Iraqis. The incident occurred in Diyala Province. – *New York Times, December 13*

December 13, 2013 (SYRIA): Fighters from the Islamic State of Iraq and the Levant (ISIL), which is linked to al-Qa`ida, reportedly kidnapped at least 120 Kurdish civilians from a village near the border with Turkey in Aleppo Province. It was just the latest incident of the ISIL targeting Kurds. – *al-Jazeera, December 13*

December 14, 2013 (MALI): A suicide bomber in an explosives-laden vehicle destroyed the only operating bank in Kidal, one day before a second round of parliamentary elections. The explosion also killed two Senegalese UN peacekeepers. – *Reuters, December 14*

December 16, 2013 (SWEDEN): Swedish authorities revealed that at least 75 people have left their country to fight in Syria since mid-2012. – *Daily Times, December 16*

December 16, 2013 (IRAQ): Two car bombs exploded in quick succession near a procession of Shi`a pilgrims in Baghdad, killing at least 27 people. – *CNN, December 16*

December 16, 2013 (NIGERIA): The United Nations said that Boko Haram has killed more than 1,200 people since a state of emergency was declared in the region in May 2013. – *This Day, December 17*

December 17, 2013 (LEBANON): A car bomb exploded near a Lebanese Hizb Allah base in Bekaa in eastern Lebanon. It was not immediately clear if a suicide bomber caused the explosion. Two Hizb Allah members were killed. – *BBC, December 17; AFP, December 17; Daily Star, December 19*

December 17, 2013 (PAKISTAN): A suicide bomber killed three people outside a Shi`a mosque in Rawalpindi. – *al-Jazeera, December 18*

December 18, 2013 (GLOBAL): The U.S. State Department designated Mokhtar Belmokhtar's al-Mulathamun Battalion as a foreign terrorist organization. Belmokhtar took credit for the attack on the In Amenas gas facility in Algeria in January 2013. – *UPI, December 18*

December 18, 2013 (SYRIA): In his first televised interview, the leader of the al-Qa`ida-linked Jabhat al-Nusra militant group in Syria, Abu Muhammad al-Julani, said that his group was not seeking to rule Syria, but that they would seek to ensure that the country is ruled by Shari`a (Islamic law). – *Reuters, December 19*

December 18, 2013 (PAKISTAN): A suicide bomber in an explosives-laden vehicle killed at least four Pakistani soldiers at a military checkpoint in the Mir Ali area of North Waziristan Agency. – *The News International, December 18*

December 18, 2013 (SOMALIA): Gunmen killed six people after attacking a convoy carrying doctors to a hospital near Mogadishu. Three Syrians were among the dead. – *Voice of America, December 18*

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The views expressed in this report are those of the authors and not of the U.S. Military Academy, the Department of the Army, or any other agency of the U.S. Government.

December 19, 2013 (IRAQ): A suicide bomber detonated explosives in a crowd of Shi'a pilgrims on the main road leading south from Baghdad to Karbala, killing 10 people. Another suicide bomber also targeted Shi'a pilgrims at a different location on the same road, killing 10 additional people. A third suicide bomber detonated explosives at a tent which had been set up to offer services for the pilgrims, killing 14 more people. - *New York Times*, December 19

December 20, 2013 (IRAQ): Two bombs tore through a sheep market in Tuz Khurmato, Salah al-Din Province, killing six people. - *AP*, December 20

December 21, 2013 (LEBANON): According to Lebanese press reports, Hizb Allah fighters ambushed and killed 32 Jabhat al-Nusra militants in east Lebanon. The Jabhat al-Nusra fighters were reportedly entering Lebanon through an illegal border crossing. - *Daily Star*, December 24

December 22, 2013 (LIBYA): A suicide bomber detonated an explosives-laden truck at an army checkpoint outside Benghazi, killing 13 Libyan soldiers. Although car bombs and assassinations occur relatively frequently in Benghazi, the suicide bombing marked a possible shift in tactics. - *Reuters*, December 23

December 23, 2013 (IRAQ): Multiple suicide bombers attacked an Iraqi television station headquarters in Tikrit, killing five journalists who worked for Salaheddin television. - *AFP*, December 23

December 24, 2013 (EGYPT): A suicide bomber attacked a security headquarters in the Nile Delta city of Mansoura, killing at least 15 people. Ansar Bayt al-Maqdis claimed responsibility. - *NBC*, December 24; *AP*, December 24; *New York Times*, December 24

December 25, 2013 (EGYPT): Egypt's military government declared the Muslim Brotherhood a terrorist organization. - *AP*, December 25

December 26, 2013 (EGYPT): A homemade bomb exploded near a bus in Cairo, injuring five passengers. - *al-Jazeera*, December 30

December 26, 2013 (PAKISTAN): Warren Weinstein, an American contractor kidnapped from his home in Lahore in August 2011 by al-Qa`ida, appealed to

U.S. President Barack Obama to help negotiate his release. - *Voice of America*, December 26

December 27, 2013 (UNITED STATES): Sinh Vinh Ngo Nguyen of Garden Grove, California, pleaded guilty to a federal terrorism charge after admitting that he tried to assist al-Qa`ida by providing weapons training. His sentencing date is scheduled for March 21, and he faces a maximum of 15 years in federal prison. - *AP*, December 27

December 27, 2013 (AFGHANISTAN): A suicide bomber in an explosives-laden vehicle attacked a NATO military convoy in Kabul, killing three NATO personnel, including an American. The Afghan Taliban claimed responsibility. - *NBC*, December 27

December 27, 2013 (LEBANON): A massive car bomb killed former Lebanese finance minister Mohamad Chatah in central Beirut. Chatah was an outspoken critic of Syrian President Bashar al-Assad. The blast killed five other people as well. - *Voice of America*, December 27

December 29, 2013 (RUSSIA): A female suicide bomber detonated explosives in the entrance hall of a Russian train station in Volgograd, killing at least 17 people. - *Reuters*, December 29; *Bloomberg*, December 30

December 29, 2013 (EGYPT): Militants remotely detonated a car bomb near the military intelligence building in Sharqiyya, injuring four people. The intelligence building was partially damaged by the blast. - *al-Jazeera*, December 30

December 30, 2013 (RUSSIA): A suicide bomber detonated his explosives in a trolleybus during rush hour in Volgograd, killing at least 14 people. - *Bloomberg*, December 30

December 31, 2013 (YEMEN): A suicide bomber detonated an explosives-laden vehicle at a police headquarters in Aden. Militants then tried to force their way into the compound, but police prevented them from entering the building. At least three Yemeni soldiers were killed. Al-Qa`ida in the Arabian Peninsula claimed responsibility. - *Reuters*, December 31; *AFP*, December 31; *Reuters*, January 2