

AIR COMMAND AND STAFF COLLEGE

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## **BIOWEAPONS TRAFFICKING**

by

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A Research Report Submitted to the Faculty

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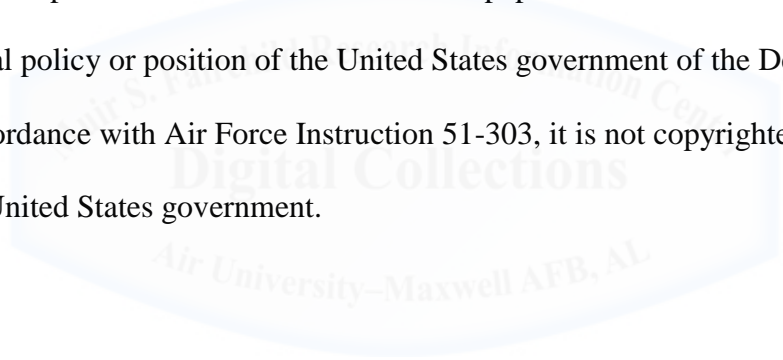
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The goal of this research is to explore the potential for a terrorist group to use a biological agent to attack the United States. First, I will provide an overview of the utility of bioweapons. Second, I will examine the abilities of terrorist groups to produce bioweapons, and third, I will analyze the ease with which they may transport bioweapons into the United States. All research is limited to that available in the public domain, commonly called “open source intelligence.”

### **Bioweapons in a Nutshell**

Iran has the most sophisticated bioweapons research program of any known state or non-state actor today. Yet all indications are that even Iran has been unable to create a reliable bioweapons capability.<sup>1</sup> Iran almost certainly has the ability to produce biological agents in controlled conditions. However, agents do not equal weapons. Storage of weaponized biological agents is quite difficult because agents degrade and lose effectiveness rapidly. The larger difficulty for Iran, and indeed any group seeking to use bioweapons, is in the delivery. The high G-forces and heat generated by ballistic missiles make them an unreliable means to deliver biological weapons. Bombs or other munitions dropped from sophisticated fighter or bomber jets are unrealistic due to the United States’ overwhelming air superiority and air defense capability. The most effective means of delivery would be to use crop-dusting techniques with a small or remotely-piloted aircraft to create a low-altitude cloud of the agent for victims to inhale.<sup>2</sup>

Even successful delivery of the agent does not guarantee a successful attack. Biological agents are inherently fragile, and are vulnerable to environmental conditions. Rain, temperature, sunlight, wind, humidity, pollution, topography and even human and animal movement and migration patterns can alter the agents’ behavior and effectiveness.<sup>3</sup> Other challenges in bioweapons programs are the lack of predictability, potential for unintended consequences, slow rate of action, and the difficulty in testing. Their slow rate of action gives victimized

communities time to respond and keeps casualty rates low. Their unpredictability contributes to the difficulty in testing. Small-scale trials, even with (presumably non-volunteer) human subjects are not likely to produce results that would be reproducible on a massive scale in turbulent, real-world conditions. Bioweapons are not appropriate for insurgency-type operations such as those the United States is undertaking in Afghanistan, where insurgents, counter-insurgents and civilians all live in the same area. Bioweapons are not selective about whom they infect and any attacks in that kind of environment could serve to harm the attacker as well. Bioweapons have potential for use in long-duration positional wars of attrition, but the likelihood of that sort of conflict diminished significantly with the end of the Cold War. Bioweapons could be useful in a terrorist attack, especially for a group based in Asia or Africa to attack citizens of North America. The continental separation would provide the attacker some level of protection from unintended effects. Even when dispersal methods are perfect, bioweapons are still unpredictable and cannot be considered a reliable means for inflicting mass casualties. Biological agents would prove more useful in environmental- or agro-terrorism where the goal would be to harm as many living things as possible, not just humans. Perhaps the greatest benefit an attacker can gain from bioweapons is in their ability to cause adversaries to panic.

The goal of terrorist groups with respect to bioweapons is not only to cause mass casualties, but also to cause chaos, panic, and fear that forces nations to spend copious amounts of money on detection and remediation programs.<sup>4</sup> To that end, terrorist groups may find it sufficient to imply a capability greater than what actually exists. Why spend large amounts of money doing time-consuming research and recruiting science and technology experts when a rudimentary capability and a significant information operations campaign can achieve the same end? Similarly, the challenges in building an effective bioweapons program described above

indicate that bioweapons require significant investment for a capability that may have high yield, but more likely will produce disappointing results. Bioweapons may just “not be worth it” and terrorist groups may choose instead to stick with what works, conventional alternatives that are cheaper and more predictable.

### **Ability of Terrorist Groups to Produce Bioweapons**

There are conflicting opinions as to whether the United States is justified in worrying about bioterrorism attacks. The government and the defense establishment have a reputation for prophesying doom and gloom, predicting hundreds of thousands of casualties from just one small bioterrorism attack. Non-government scientists, however, argue that those claims are hyperbole and that the true threat is so remote that it does not justify the millions of dollars spent in defense. Milton Leitenberg is a Senior Research Scholar in the field of Arms Control for the Center for International and Security Studies at Maryland.<sup>5</sup> He points out that Dr. Aym an al-Zawahiri, Osama Bin Laden’s deputy and Al Qaeda’s operational mastermind, proclaimed that Al Qaeda had no knowledge of biological weapons until the United States indicated that those weapons could be easily produced.<sup>6</sup> In effect, the United States created a threat where none previously existed. Leitenberg continues to assert that biological weapons are much more difficult to produce, store and disperse than the US government would have citizens believe. He argues that the biodefense community is exaggerating the threat and that monies spent on biodefense could be better utilized to treat diseases and conditions that kill millions of people annually such as cancer and obesity. Public health advocates acknowledge the inflated threat of bioterrorism does not match reality and therefore is not a useful mechanism for raising support. “Unless the United States faces fairly regular bioterrorism attacks, or attacks with substantially

higher death rates than the anthrax attack, it will be impossible to sustain public, and therefore political, support.”<sup>7</sup>

Rolf Mowatt-Larssen, former Director of Intelligence at the U.S. Department of Energy, takes the opposite view. He compiled a chronology of Al Qaeda behaviors that suggest the group is not only actively seeking bioweapons technology, but also are purposefully refraining from performing the crude, low-tech biological attacks of which they are already capable. Instead, they hope to further develop their bioweapons program and eventually pull off a massive strategic biological attack on a scale larger than 9/11.<sup>8</sup> Al Qaeda’s first known venture into bioweapons research was in early 1999 when Zawahiri recruited Rauf Ahmed, a Pakistani biologist, to build a biological weapons lab in Kandahar, Afghanistan. In that same year, the head of Jemaah Islamiya (JI), a group sympathetic to Al Qaeda, introduced Malaysian Yazid Sufaat to Zawahiri for the purpose of developing anthrax. Sufaat was to develop the pathogen while Ahmed was to set up the equipment. Neither man knew of the other, although both reported to Zawahiri independently.<sup>9</sup> The next mention of Al Qaeda’s bioweapons program is summer 2001 when Abderraouf Jdey, a biology major carrying biology texts, was detained while travelling from Canada to the United States with Zacharias Moussaoui who was carrying crop duster manuals.<sup>10</sup> Mowatt-Larssen’s report says nothing more about Al Qaeda’s bioweapons program save for the December 2001 arrest of Ahmed and August 2003 arrest of JI’s chief, Hambali, who each confirmed Al Qaeda’s anthrax program. His chronology ends in 2003, presumably because intelligence data since that time remain classified.

In December 2008, the Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism concluded, “In recent years, the United States has received strategic warnings of biological weapons use from dozens of government reports and expert panels.”<sup>11</sup>

This researcher was unable to find any reliable evidence of an existing biological weapons program for Al Qaeda or any other terrorist group for that matter. If one discounts any conspiracy theory, then the only reasonable conclusion is that the information cited in this report is at the classified level.

What is undisputable is the fact that since the mid 1980s, there have only been two biological attacks, worldwide. In 1985, a religious extremist organization in Oregon introduced Salmonella to a local restaurant's salad bar, hoping to sicken residents and keep them home on Election Day.<sup>12</sup> Over 750 people were ill as a result. All survived. The second attack was the 2001 "Amerithrax" attacks perpetrated by a US biodefense lab worker (who had a patent for an anthrax vaccine) which resulted in five deaths.<sup>13</sup> Another place where Leitenberg and Mowatt-Larssen agree is that Al Qaeda is the "only group known to be...developing weapons to be used in mass casualty attacks."<sup>14,15</sup> This researcher was also unable to find any documentation indicating that other non-state actors or terrorist groups have an interest in a biological weapons program.<sup>16</sup> The one exception is a paper presented by Dany Shoham for the Ariel Center for Policy Research, a pro-Israel organization dedicated to the security policy and peace process between Israel and its neighbors. Mr. Shoham's voluminous list of chemical and biological "events" includes instances of empty threats, mere mentions of "concern," and accidental contamination from poor hygiene practices.<sup>17</sup> The primary source for the majority of his assertions is the Israeli tabloid, *Ma'ariv*. *Ma'ariv* is only available in Hebrew, but exploring their website with the help of Google translator did little to convince this researcher of its impartiality.

### **Transporting Bioweapons into the United States**

In the 1970s and 80s, terrorist groups were able to obtain support, either overtly or covertly, from states with whom they shared a common enemy. In 1993, the US Department of State noted that, "International terrorism would not have flourished as it has during the past few decades without the funding, training, safe haven, weapons, and logistic support provided to terrorists by sovereign states."<sup>18</sup> Since the mid-1990s, however, international pressures have reduced the number of states willing to sponsor terrorism.<sup>19</sup> Terrorist groups have since had to find alternate means of financial and logistical support. It should come as no surprise that they look to international criminal organizations as models of how to raise funds and traffic illegal goods. The link between criminal and terrorist organizations typically takes one of two forms. Either the terrorist organization resorts to criminal activities like drug smuggling or kidnapping as sources of revenue, or the criminal group provides trafficking services for the terrorist group in exchange for compensation. Both criminal and terrorist organizations exploit geographic regions with no or limited government presence such as the tri-border area of Paraguay, Brazil and Argentina. Lack of sufficient law enforcement makes these areas safe havens for groups to train, rest and plan future operations.<sup>20</sup>

On December 16, 2009, Three Al Qaeda associates were arrested in Ghana on charges of agreeing to transport cocaine through Africa for the Revolutionary Armed Forces of Colombia (FARC). The record alleges that the FARC was smuggling narcotics through Africa to Spain and required the assistance of Al Qaeda-Islamic Maghreb (AQIM), who controls North Africa's smuggling routes. AQIM agreed to support FARC based on their common hatred of Americans. US Drug Enforcement Agency Acting Administrator Michele Leonhart said the arrests, "are further proof of the direct link between dangerous terrorist organizations, including Al Qaeda, and international drug trafficking that fuels their violent activities."<sup>21</sup> It is reasonable to conclude



that as the relationships between criminal and terrorist organizations develop, terrorist groups will gain further access to criminal trafficking routes. They will then have a capability to exploit these routes to transport weapons of mass destruction (WMD) around the globe and into the United States.

Another troubling indicator of potential for WMD smuggling is the preponderance of illegal immigrants using extended human trafficking networks to travel to Mexico where they can then cross the border undetected. Since September 11, 2001, the United States has taken rigorous steps to prevent would-be terrorists from entering the country. These extra security measures may have had the unintended effect of encouraging terrorists to cross our land borders secretly, rather than attempt air travel. The Mexican border, particularly with Texas, has a reputation as being relatively porous and easy to penetrate. Stricter anti-immigration policies face opposition from the large Hispanic population in Texas as being racist, making it difficult for the government to implement border controls. Smugglers are not the only ones enabling people to enter the United States illegally. Frequently government officials from nearby countries will knowingly issue passports or visas to people without so much as a check on their background or intentions. Armando Perez Suarez, the Cuban consul in Damascus, justified this saying that he knows Cuba, with its economic problems and poverty, is not anyone's idea of a final destination. "After that, if he wants to travel to any other country, the U.S., or Central America, this is not our problem, it's not our burden."<sup>22</sup> Other Latin American officials in the Middle East openly accept bribes, something that is acceptable as a normal part of doing business in both cultures, in return for fraudulent travel visas.<sup>23</sup>

While US pressure may encourage more transparency and honesty from foreign embassies in the Middle East, the only thing the United States has absolute control of in this

situation is its border security. As long as there are opportunities for illegal immigrants to enter the US freely, terrorists and others who wish to do harm to Americans will exploit those channels to gain access to sovereign territory. Tighter border controls are needed not because of racism or isolationism, but to ensure national security.

My research using OSINT to evaluate the potential for terrorists to use biological weapons in the United States led to the following conclusions: First, bioweapons are very cumbersome to produce, store, and deploy. Second, Al Qaeda is the only known terrorist group that poses a biological threat. Third, alliances with criminal networks and corrupt officials make trafficking in both persons and weapons a very real threat. Open sources intelligence research does leave some issues unresolved. Does Al Qaeda truly have a bioweapons capability worth defending against? Does Al Qaeda's bioweapons and trafficking network extend across the Pacific Ocean between Asia and the Americas? The information to answer these questions was not easily located on the open internet. Perhaps the biggest thing to remember is that with all the information gleaned from open sources, it should never be considered complete. Just because information is not available via open sources, does not mean it isn't there.

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<sup>1</sup> Anthony Cordesman, *Iranian Weapons of Mass Destruction: Biological Weapons Programs*, Center for Strategic and International Studies (October 28, 2008).

<sup>2</sup> Ibid., 25.

<sup>3</sup> Gary Ackerman and Kevin Moran, *Bioterrorism and Threat Assessment*, Weapons of Mass Destruction Commission (Stockholm, Sweden, November 2004), 11.

<sup>4</sup> Division of NBC Defence, Swedish Defence Research Agency, *Indicators of State and Non-State Offensive Chemical and Biological Programmes*, Weapons of Mass Destruction Commission (Stockholm, Sweden, August 2005), 14.

<sup>5</sup> Center for International and Security Studies at Maryland, "Milton Leitenberg,"

<http://www.cissm.umd.edu/people/profile.php?id=23>

<sup>6</sup> Milton Leitenberg, *Assessing the Threat of Biological Weapons and Bioterrorism: A Public Policy Issue*, CISSM, School of Public Policy, University of Maryland James Martin Center for Nonproliferation Studies (March 18, 2009), 18.

<sup>7</sup> Edward Richards, Terry O'Brien and Katharine Rathbun, "Bioterrorism and the Use of Fear in Public Health," *The Urban Lawyer* 34, no.3 (Summer 2002): 689, <http://biotech.law.lsu.edu/Articles/urbanlawyer.pdf>.

<sup>8</sup> Rolf Mowatt-Larssen, *Al Qaeda Weapons of Mass Destruction Threat: Hype or Reality?* Belfer Center for Science and International Affairs, Harvard Kennedy School (Cambridge, MA, January 2010), 7.

<sup>9</sup> Mowatt-Larssen, *Al Qaeda Weapons of Mass Destruction Threat*, 14.

<sup>10</sup> Mowatt-Larssen, *Al Qaeda Weapons of Mass Destruction Threat*, 16.

<sup>11</sup> Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, *The Clock is Ticking: A Progress Report on America's Preparedness to Prevent Weapons of Mass Destruction Proliferation and Terrorism* (Washington, DC, October 21, 2009), 3.

<sup>12</sup> Richard, O'Brien and Rathbun, "Bioterrorism and the Use of Fear," 690.

<sup>13</sup> Carsten Weerth, "The Cross-Border Detection of Radiological, Biological and Chemical Active and Harmful Terrorist Devices," *World Customs Journal* 3, No. 2 (September 2009): 97.

<sup>14</sup> Leitenberg, *Assessing the Threat*, 22.

<sup>15</sup> Mowatt-Larssen, *Al Qaeda Weapons of Mass Destruction Threat*, 5.

<sup>16</sup> State run bioweapons programs are excluded.

<sup>17</sup> Dany Shoham, *Chemical and Biological Terrorism: Profile of an Intensifying Non-Conventional Threat*, Ariel Center for Policy Research Policy Paper No. 43, (1998), 11.

<sup>18</sup> Department of State, *Patterns of Global Terrorism*, Department of State Publication 10136 (Washington, DC: U.S. Department of State, April, 1994), [http://www.fas.org/irp/threat/terror\\_93/statespon.html](http://www.fas.org/irp/threat/terror_93/statespon.html).

<sup>19</sup> David T. Johnson, "The Escalating Ties between Middle Eastern Terrorist Groups and Criminal Activity" (remarks, Washington Institute for Near East Policy, Washington, DC, 19 January 2010).

<sup>20</sup> Ibid.

<sup>21</sup> United States Attorney Southern District of New York, *Manhattan U.S. Attorney Charges Three Al Qaeda Associates with Conspiring to Transport Cocaine Through Africa for the FARC* (December 18, 2009), 4, <http://www.justice.gov/usao/nys/pressreleases/December09/issaoumaretarrestspr.pdf>.

<sup>22</sup> Todd Bensman, "Breaching America: War Refugees or Threats," San Antonio Express News, 20 May 2007, [http://www.mysanantonio.com/news/MYSA052007\\_01A\\_SIA\\_Main\\_PartOne\\_Jump2\\_8766bac8\\_html13027.html](http://www.mysanantonio.com/news/MYSA052007_01A_SIA_Main_PartOne_Jump2_8766bac8_html13027.html)

<sup>23</sup> Ibid.

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