# CHAPTER THREE CASE STUDY: AL-QA'IDA IN AFGHANISTAN

# **Summary & Findings**

In accordance with the Executive Order, the Commission compared the Intelligence Community's assessment of chemical, biological, radiological, and nuclear weapons in Afghanistan before and after Operation Enduring Freedom, the U.S.-led invasion of October 2001. We believe that the Intelligence Community correctly assessed al-Qa'ida's limited ability to use these weapons to inflict mass casualties. However, the war in Afghanistan and its aftermath revealed important new information about the level and direction of chemical, biological, and nuclear research and development that was underway. Specifically, we found that:

- The Intelligence Community concluded that at the time of the commencement of the war in Afghanistan, al-Qa'ida's biological weapons program was both more advanced and more sophisticated than analysts had previously assessed;
- Analytic judgments regarding al-Qa'ida's chemical weapons capabilities did not change significantly as a result of the war:
- The Community appears to have been correct in its assessment of the low probability that al-Qa'ida had built a nuclear device or obtained sufficient material for a nuclear weapon. However, the war in Afghanistan brought to light detailed and revealing information about the direction and progress of al-Qa'ida's radiological and nuclear ambitions;
- Intelligence gaps prior to the war in Afghanistan prevented the Intelligence Community from being able to assess with much certainty the extent or specific nature of al-Qa'ida's weapons of mass destruction capabilities;
- Analysis of al-Qa'ida's potential development of weapons of mass destruction in Afghanistan did not benefit from leveraging different analytic disciplines; and
- Analysts writing on al-Qa'ida's potential weapons of mass destruction efforts in Afghanistan did not adequately or explicitly state the basis for or the assumptions underlying their most critical judgments.

## INTRODUCTION

On October 7, 2001, less than a month following the September 11 attacks, the United States began combat operations over the skies of Afghanistan. Operation Enduring Freedom's initial objectives were to destroy terrorist training camps and infrastructure, capture al-Qa'ida leaders, and force the cessation of all activities by and in support of terrorists within Afghanistan's borders. As a byproduct of these operations, the U.S. Intelligence Community was able to collect documents, conduct detainee interviews, and search former al-Qa'ida facilities, assembling intelligence that shed startling light on al-Qa'ida's intentions and capabilities with regard to chemical, biological, radiological, and nuclear weapons.

As directed by Executive Order, the Commission compared Intelligence Community assessments regarding al-Qa'ida's weapons of mass destruction programs in Afghanistan prior to the war with evidence obtained as a consequence of military operations and the updated assessments that resulted. In so doing, we reviewed raw and finished intelligence products, conducted interviews with analysts, and examined collection requirements documents and other information.

We found that just prior to the war in Afghanistan in 2001, the Intelligence Community was able to correctly assess al-Qa'ida's limited ability to use unconventional weapons to inflict mass casualties. Yet when the war uncovered new evidence of WMD efforts, analysts were surprised by the intentions and level of research and development underway by al-Qa'ida. Had this new information not been acquired, and had al-Qa'ida been allowed to continue weapons development, a future intelligence failure could have been in the offing.

A note before proceeding: this unclassified review of the Intelligence Community's performance on Afghanistan is necessarily more limited than the classified version. In particular, it does not go into great detail on the Intelligence Community's continuing efforts to collect and analyze intelligence relating to al-Qa'ida and its chemical, biological, radiological, and nuclear weapons. The reason for this is that any such discussion would invariably pose too great a risk of disclosing to al-Qa'ida (and other adversaries) information that could be used to defeat our intelligence capabilities in the future. Consequently, significant portions of our classified report are simply too sensitive for public disclosure.

# COMPARISON OF INTELLIGENCE: "BEFORE" AND "AFTER" SNAPSHOTS OF AL-QA'IDA'S WEAPONS OF MASS DESTRUCTION PROGRAMS IN AFGHANISTAN

# **Biological Weapons**

# Finding 1

Information obtained through the war in Afghanistan and in its aftermath indicated that al-Qa'ida's biological weapons program was further along than analysts had previously assessed.

#### Pre-War

Information in the Intelligence Community's possession since the late 1990s indicated that al-Qa'ida's members had trained in crude methods for producing biological agents such as botulinum toxin and toxins obtained from venomous animals. But the Community was uncertain whether al-Qa'ida had managed to acquire a far more dangerous strain of agent (an agent we cannot identify precisely in our unclassified report and so will refer to here as "Agent X"). The Community judged that al-Qa'ida operatives had "probably" acquired at least a small quantity of this virulent strain and had plans to assemble devices to disperse the agent. While the Community believed that a facility to which the group had access provided the potential capability and expertise to produce biological agents, it had no evidence that the facility was being so used. Likewise, the Intelligence Community assessed that al-Qa'ida was "highly unlikely" to have acquired two other dangerous biological agents, and had no credible reporting indicating it was attempting to do so.

#### Post-War

In fact, al-Qa'ida's biological program was further along, particularly with regard to Agent X, than pre-war intelligence indicated. The program was extensive, well-organized, and operated for two years before September 11, but intelligence insights into the program were limited. The program involved several sites in Afghanistan. Two of these sites contained commercial equipment and were operated by individuals with special training. Documents found indicated that while al-Qa'ida's primary interest was Agent X, the group had

considered acquiring a variety of other biological agents.  $^9$  The documents obtained at the training camp included scientific articles and handwritten notes pertaining to Agent X.  $^{10}$ 

Reporting supports the hypothesis that al-Qa'ida had acquired several biological agents possibly as early as 1999, and had the necessary equipment to enable limited, basic production of Agent X. <sup>11</sup> Other reporting indicates that al-Qa'ida had succeeded in isolating cultures of Agent X. Nevertheless, outstanding questions remain about the extent of biological research and development in pre-war Afghanistan, including about the reliability of the reporting described above. <sup>12</sup>

# **Chemical Weapons**

## Finding 2

Analytic judgments regarding al-Qa'ida's chemical weapons capabilities did not change significantly as a result of the war.

#### Pre-War

Prior to the war in Afghanistan, analysts assessed that al-Qa'ida "almost certainly" had small quantities of toxic chemicals and pesticides, and had produced small amounts of World War I-era agents such as hydrogen cyanide, chlorine, and phosgene. <sup>13</sup> Unconfirmed reporting indicated that al-Qa'ida operatives had sought to acquire more modern and sophisticated chemical agents. <sup>14</sup> Training manuals used by al-Qa'ida indicated that group members were familiar with the production and deployment of common chemical agents. <sup>15</sup> Nevertheless, the Intelligence Community was doubtful that al-Qa'ida could conduct attacks with advanced chemical agents potentially capable of causing thousands of casualties or deaths. <sup>16</sup>

#### Post-War

The war in Afghanistan and its aftermath revealed relatively little new intelligence on the group's chemical efforts. Several miscellaneous items appeared in the wake of the war. <sup>17</sup> One item, for example, described work on a pesticide that used a chemical to increase absorption; the agent was apparently tested on rabbits and dogs. <sup>18</sup>

U.S. military teams also found glassware and chemical reagents at an al-Qa'ida training camp. CIA assesses that samples taken from the site may contain trace amounts of two common chemicals that can be used to produce a blister agent. <sup>19</sup> There is reporting indicating that the group was attempting to produce this blister agent, and considered using it to attack Americans. <sup>20</sup> In total, however, these scattered pieces of evidence have not substantially altered the Intelligence Community's pre-war assessments of al-Qa'ida's chemical program.

As with al-Qa'ida's biological weapons program, questions persist about the group's historical and current chemical weapons programs. <sup>21</sup>

# Radiological and Nuclear Weapons

# Finding 3

The war in Afghanistan brought to light detailed and revealing information about the direction and progress of al-Qa'ida's radiological and nuclear ambitions.

## Pre-War

The Intelligence Community assessed that al-Qa'ida was unlikely to have built a nuclear device or obtained sufficient fissile material for a nuclear weapon, and was "significantly less likely" to have acquired a complete nuclear weapon. However, the Community lacked a high confidence level in these judgments because of "substantial" information gaps. Analysts were apparently most worried about the possibility that al-Qa'ida could obtain nuclear material from outside sources.

Given their level of uncertainty, the Intelligence Community's concerns about al-Qa'ida's unconventional weapons capabilities grew in November 2001 when, in an interview with a Pakistani journalist, Usama Bin Laden claimed that he had both nuclear and chemical weapons. <sup>25</sup> In response, the CIA's Weapons Intelligence, Nonproliferation, and Arms Control Center and the DCI's Counterterrorist Center produced an assessment speculating about al-Qa'ida's nuclear options. The report judged that al-Qa'ida probably had access to nuclear expertise and facilities and that there was a real possibility of the group developing a crude nuclear device. <sup>26</sup>

The Intelligence Community could not ultimately reach a definitive conclusion about whether al-Qa'ida possessed radiological material that could be dispersed via conventional weaponry. Considering the wide availability of radiological materials and the fact that al-Qa'ida training manuals discussed the use of such substances for assassinations, the Intelligence Community concluded that such a weapon was well within al-Qa'ida's capabilities.

#### Post-War

Documents found at sites used by al-Qa'ida operatives indicated that the group was interested in nuclear device design. In addition, al-Qa'ida had established contact with Pakistani scientists who discussed development of nuclear devices that would require hard-to-obtain materials like uranium to create a nuclear explosion. In

In May 2002, technical experts from CIA and the Department of Energy judged that there remained no credible information that al-Qa'ida had obtained fissile material or acquired a nuclear weapon. Analysts noted that collection efforts in Afghanistan had not yielded any radioactive material suitable for weapons, and that there were no credible reports of nuclear weapons missing from vulnerable countries.

Among the nuclear-related documents found by U.S. forces in Afghanistan was a manual that discussed openly available concepts about the nuclear fuel cycle and some weapons-related issues.<sup>34</sup>

Collection by media sources also added some details to the intelligence picture surrounding al-Qa'ida's weapons of mass destruction efforts. In November 2001, CNN journalists found hundreds of documents describing al-Qa'ida's nuclear and explosive development efforts in an abandoned safe house. CNN commissioned three experts to review the documents, including David Albright, an expert on proliferation who had been a consultant to the United Nations organization investigating Iraq's weapons program. CNN published the results of this work in January 2002, concluding that al-Qa'ida was pursuing a "serious weapons program with heavy emphasis on developing a nuclear device." <sup>35</sup>

# AWAKENING TO A NEW THREAT: COLLECTION SHORTFALLS AND ANALYTIC UNCERTAINTY

The war in Afghanistan and its aftermath confirmed two key intelligence judgments made before the September attacks: al-Qa'ida did not have a nuclear device, nor did it have large-scale chemical and biological weapons capabilities. However, information obtained in the course of the war revealed that analysts were largely unaware of the extent of al-Qa'ida's weapons of mass destruction research and development (especially with regard to Agent X) in Afghanistan. Moreover, while analysts had suspected that al-Qa'ida was interested in sophisticated weapons, including nuclear devices, the war provided real information about specific efforts to obtain these weapons.

Our study revealed a number of overarching problems that help to explain why the Intelligence Community assessed al-Qa'ida's capabilities the way it did. These problems are likely to affect the Intelligence Community's future performance with regard to assessing the unconventional weapons programs of al-Qa'ida, other terrorist groups, and rogue states.

# Inadequate Collection: Little Insight into Al-Qa'ida's Capabilities and Intentions

## Finding 4

Intelligence gaps prior to the war in Afghanistan prevented the Intelligence Community from being able to assess with much certainty the extent of al-Qa'ida's weapons of mass destruction capabilities.

The underestimation of al-Qa'ida's fast-growing unconventional weapons capabilities and aggressive intentions is a failure in the first instance to understand adequately the character of al-Qa'ida after ten years of its mounting attacks against us (as documented in the 9/11 Commission Report), and its aspirations to acquire highly lethal weapons. This failure led the Intelligence Community to focus inadequate resources on al-Qa'ida as a target. A post-September 11 National Intelligence Estimate, prepared as the war in Afghanistan began in October 2001, highlighted how little the Intelligence Community actually knew,<sup>36</sup> including the scarcity of reporting on al-Qa'ida

targets.<sup>37</sup> The National Intelligence Estimate went on to describe further the nature of the intelligence gaps.<sup>38</sup>

Indeed, as one Counterterrorist Center official told us, the Intelligence Community "entirely missed" assessing the size and scope of al-Qa'ida's Agent X program: "If it hadn't been for finding a couple key pieces of paper [in Afghanistan]...we still might not have an appreciation for it. We just missed it because we did not have the data."<sup>39</sup> Other analysts noted that the documents and detainees accessed as a result of the war in Afghanistan combine to show that al-Qa'ida had a "major biological effort" and had made meaningful progress on its nuclear agenda. <sup>40</sup> Despite diligent collection efforts after 1998, it was "remarkable how much [the Community] had not identified [in Afghanistan]."<sup>41</sup>

Although the Intelligence Community had limited information about al-Qa'ida, it was not able to assemble a more complete picture of the group's efforts because it failed to penetrate the al-Qa'ida network. Human intelligence penetration of such highly compartmented, security-conscious groups, composed primarily of Middle Eastern males, is and will likely always be a highly difficult task. 42

Moreover, for reasons we documented in our previous chapters on Iraq and Libya, technical collectors often have great difficulty tracking weapons of mass destruction efforts. This is especially true for non-state actors.

# Analysis: Cross-Discipline Collaboration, Warning, and Evaluation

## Finding 5

Analysis on al-Qa'ida's potential weapons of mass destruction development in Afghanistan did not benefit from leveraging different analytic disciplines.

Analysis of al-Qa'ida's unconventional weapons efforts in Afghanistan should bridge three different analytic disciplines—traditional regional analysis, state-focused weapons of mass destruction technical analysis, and terrorism analysis. Yet, in this case, analysts in these disciplines often did not work together. Organizational structures, information handling barriers (including data access and storage), and cultural disconnects blocked effective collaboration—including cooperation in testing analytical assumptions.

For example, traditional WMD analysts, who possess most of the Community's WMD technology expertise, focused mostly on state WMD programs—programs that often employ modern production and weaponization techniques. Terrorism analysts, on the other hand, needed to focus on lesser, often even crude, technologies more applicable to terrorists' needs and capabilities. Terrorism analysts even used a different vocabulary to describe unconventional weapons capabilities, using the term "CBRN"—chemical, biological, radiological, and nuclear—weapons programs instead of "WMD" programs. Afghanistan regional analysts focused more on political, economic, opium production, and military (Taliban) issues. In truth, credible analysis of al-Qa'ida's unconventional weapons programs required expertise from all three disciplines, but didn't get it.

This division among analysts was reflected in their competing assessments of al-Qa'ida's unconventional weapons capabilities in the year 2000. Some state-program analysts felt that terrorism analysts were overestimating the potential threat because non-state actors were technologically limited and, in their view, Afghanistan lacked the necessary resources and infrastructure for sophisticated weapons of mass destruction development. These differences in views would be re-examined after September 11,<sup>43</sup> but differences in analytic approach persisted. While here and elsewhere in this report we speak of the value of competitive analysis, here was an example that makes the point that competing analysis is of no use, even counterproductive, if there is no attempt at constructive dialogue and collaboration.

## Finding 6

Analysts writing on al-Qa'ida's potential weapons of mass destruction efforts in Afghanistan did not adequately state the basis for or the assumptions underlying their most critical judgments. This analytic shortcoming is one that we have seen in our other studies as well, such as Iraq, and it points to the need to develop routine analytic practices for quantifying uncertainty and managing limited collection.

A lack of cooperation across disciplines was only one of the analytical short-comings we observed. In general, the Community's analysts did not do enough to optimize the reliability of their predictive assessments. For example, analysts' most serious judgment—that Usama Bin Laden did not have a nuclear device—was made in the absence of *any* hard data. The Intelligence

Community assessed that fabrication of at least a "crude" nuclear device was within al-Qa'ida's capabilities, if it could obtain fissile material. <sup>44</sup> Despite the self-evident importance of the issue and the profound uncertainty surrounding it, documents we reviewed indicate that the conclusion that al-Qa'ida did not have a nuclear device was reached without in-depth technical analysis assessing potential al-Qa'ida capabilities, <sup>45</sup> a formal assessment of al-Qa'ida denial and deception capabilities related to Afghanistan, or tests of key assumptions underlying analytic judgments.

At the very least, analysts could have highlighted for policymakers the uncertain foundations of their key assessments. However, some analytic products on al-Qa'ida's unconventional weapons capabilities, both before and after September 11, offered highly speculative judgments without citing any evidentiary anchors, while others used single sources, and in some cases, dated information. As a result of these poor analytic practices, it is impossible to determine what information analysts were working with or how they weighted that information in formulating judgments. For example, a November 2001 assessment by CIA's Weapons Intelligence, Nonproliferation, and Arms Control Center pertaining to al-Qa'ida's possible nuclear capabilities offers numerous important judgments regarding the group's intentions to use nuclear weapons and its level of technical expertise. The report does not, however, explain the foundation for these assessments or cite prior reporting or finished products to support its conclusions. 46 The National Intelligence Estimates were the only products we reviewed that consistently laid out sources, collection issues, and intelligence gaps for readers, thus highlighting what the Community both did and did not know.

## CONCLUSION

Key questions remain about al-Qa'ida and Afghanistan. There are critical intelligence gaps with regard to each al-Qa'ida unconventional weapons capability—chemical, biological, and nuclear. To address these problems, it is essential that the Community focus resources on the difficult task of increasing human intelligence collection on terrorist groups in general, and on al-Qa'ida in particular. We offer recommendations on how to improve our nation's human intelligence capabilities in Chapter Seven (Collection) of this report.

## **ENDNOTES**

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<sup>1</sup> National Intelligence Council (NIC), Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at
p. 4.
    <sup>2</sup> Id. at pp. 4-5.
    <sup>3</sup> Id. at p. 1.
    <sup>4</sup> Id. at p. 7.
    <sup>5</sup> Id. at p. 8.
    <sup>6</sup> DCI's Counterterrorist Center, Title Classified (May 23, 2002) at p. 1.
    <sup>7</sup> NIC, Title Classified (NIE 2004-08HC/I) (Dec. 2004) at p. 117; DIA, Submission to the
Commission (March 2, 2005).
    <sup>8</sup> Id.
    <sup>9</sup> Id. at pp. 117-118.
    <sup>10</sup> Id. at p. 118.
    <sup>11</sup> DCI's Counterterrorist Center, Title Classified (May 23, 2002) at p. 2; DIA, Submission
to the Commission (March 2, 2005).
    <sup>12</sup> Id. at p. 1.
    <sup>13</sup> NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001).
    <sup>14</sup> Id.
    <sup>15</sup> Id.
    <sup>16</sup> Id. at p. 1.
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- <sup>18</sup> In August 2002, CNN obtained a large archive of al-Qa'ida video. Among the 64 cassettes was material showing operatives experimenting with lethal chemical gas on three dogs. Nic Robertson, *Tapes Shed New Light on Bin Laden's Network* (CNN Aug. 18, 2002), *available at* archives.cnn.com/2002/US/ 08/18/terror.tape.main/ (accessed March 10, 2005).
  - <sup>19</sup> DCI's Counterterrorist Center, Title Classified (May 23, 2002) at p. 4.
  - <sup>20</sup> *Id*.
  - <sup>21</sup> CIA, Submission to the Commission (March 10, 2005).
  - <sup>22</sup> NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 8.

<sup>17</sup> DCI's Counterterrorist Center, Title Classified (May 23, 2002).

- <sup>23</sup> Id.
- <sup>24</sup> *Id.* The Intelligence Community was also aware that during the U.S. trial of Usama Bin Laden and others for the August 7, 1998 bombings of the East African embassies, prosecution witness Jan Ahmade al-Fadl detailed efforts to assist Bin Laden in an attempt to acquire uranium from a source in Sudan in late 1993 and early 1994.
- <sup>25</sup> Tim Weiner, "Bin Laden Asserts He Has Nuclear Arms," *New York Times* (Nov. 10, 2001) at p. B4 (recounting Bin Laden's assertion in the Pakistani English-language daily newspaper, *Dawn*, that "[w]e have chemical and nuclear weapons as a deterrent and if America used them against us, we reserve the right to use them").
  - <sup>26</sup> CIA, Title Classified (WINPAC IA 2001-060) (Nov. 23, 2001).
  - <sup>27</sup> NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 8.

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DCI's Counterterrorist Center, Title Classified (May 23, 2002).
NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001).
DCI Counterterrorist Center, Title Classified (May 23, 2002) at p. 3.
Id.
Id.
Id.
Id. at p. 4.
CIA, Submission to Commission (March 4, 2005).
Id.
NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 12.
Id. at pp. 9, 12.
Id. at pp. 12.
Interview with CIA analysts and other Intelligence Community senior analysts (Sept. 28, 2004).
Id.
Id.</li
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- <sup>42</sup> It was perhaps never more so than during much of the decade leading up to the September 11 attacks, when the Intelligence Community was only beginning to awaken to and focus in earnest on the emerging threat of non-state terrorist groups. During that time, collection and analytical emphasis remained primarily focused on state actors, rather than terrorist organizations. Concurrently, the Intelligence Community was facing a resource crisis as a part of post-Cold War budget cuts. In addition, based on our interviews with analysts from several agencies and our review of the written record, it is clear to us that between 1991 and 1996 (while Usama Bin Laden was operating in Sudan), the Intelligence Community paid little attention to collection activities in Afghanistan, or maintenance of the covert infrastructure the CIA had developed there as a result of its anti-Soviet activities in the 1980s.
- <sup>43</sup> Interview with CIA analysts and other Intelligence Community senior analysts (Sept. 28, 2004).
  - <sup>44</sup> Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 12.
- <sup>45</sup> We found one exception to the general lack of technical analysis and context, involving a Senior Executive Intelligence Memo in early 2001 in which CIA and nuclear experts speculated on why Usama Bin Laden might be seeking to use uranium with conventional explosives. Several technical scenarios were briefly examined.
  - <sup>46</sup> CIA, Title Classified (WINPAC IA 20001-060) (Nov. 23, 2001) at p. 1.