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# UGLY TRUTHS

SADDAM HUSSEIN AND OTHER INSIDERS ON IRAQ'S COVERT BIOWEAPONS PROGRAM



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## UGLY TRUTHS:

SADDAM HUSSEIN AND OTHER INSIDERS ON IRAQ'S COVERT BIOWEAPONS PROGRAM

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JAMES MARTIN CENTER FOR NONPROLIFERATION STUDIES

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#### INTRODUCTION

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m A}$ lthough the inspections of the United Nations Special Commission (UNSCOM), which operated from April 1991 to October 1998, unmasked Iraq's biological weapons program and revealed a considerable amount of detail about its planning, organization, and execution, various factors about the program remain unclear. These gaps in information persisted through the activities and reporting of both the United Nations Monitoring, Verification, and Inspections Commission, which existed from December 1999 until the outbreak of the second Gulf War in March 2003, and the Iraq Survey Group, which reported on the remnants of Iraq's weapons of mass destruction capabilities after the 2003 Gulf War.<sup>1</sup> To deepen understanding about Iraq's biological weapons program, a team of analysts from the James Martin Center for Nonproliferation Studies (CNS) identified a number of research questions that, if answered, would provide a more comprehensive account of Iraq's biological and chemical weapons programs. The twenty research questions ran the gamut of relevant topics. Specifically with regard to the bioweapons program, the research questions sought to clarify the reasons behind Iraq's choice of biowarfare agents and delivery systems, the timeline and technical specifics for certain activities, possible interaction with governments and biowarfare experts outside of Iraq, the management of the program, and the details of how Iraq disposed of its biological munitions and bulk biowarfare agent.

In an effort to answer some or all of these questions, CNS's staff turned to the records of the Conflict Records Research Center (CRRC) database. In mid-July 2011, the time in which CNS's staff reviewed the CRRC records for information pertinent to Iraq's biological weapons program, it should be noted that a relatively small fraction of the documents in the possession of the CRRC had been translated into English and made available in the CRRC database. Accordingly, the review of the database did not turn up a tremendous number of documents providing insights about Iraq's biological weapons program. Nonetheless, the review uncovered several documents that shed light largely on the political management of Iraq's bioweapons program and how Iraq's leaders tried to cope with UNSCOM's inspections.

This report, which begins with a brief review of the search methodology, otherwise presents the research findings in rough but not exact chronological order. To help the reader quickly grasp the relevance of the research findings in a history that is complicated and sometimes full of technical detail, the research findings are interlaced with background derived largely from *Germ Gambits: The Bioweapons Dilemma, Iraq and Beyond* (Stanford University Press, 2011). *Germ Gambits*, which tells the tale of UNSCOM's bioweapons inspections in Iraq, is based primarily on interviews with UNSCOM inspectors, buttressed by UNSCOM documents and secondary materials. Therefore, any citation to *Germ Gambits* is based on numerous authoritative sources. Because this report provides the unadulterated Iraqi view on certain topics, in a certain sense it is like seeing the other side of the coin that *Germ Gambits* presents. CNS Senior fellow Amy E. Smithson, PhD, wrote *Germ Gambits* and was the principal researcher reviewing the biological weapons-related documents in the CRRC database.

#### Search Methodology for the CRRC Database

Combing a large electronic database for information relevant to specific research questions is best accomplished by using keyword search terms. Prior to July 2011, CNS researchers provided the staff of the CRRC with terms and timeframes specific to the Iraqi biological weapons program that might have drawn particularly compelling documents from the CRRC database, providing such documents had already been translated and, of course, that the Iraqis had used these terms in the documents. For example, "Project 324" became a search term because this was the code name for Iraq's main bioweapons production facility, Al Hakam, which the Iraqis began building in 1988 in total secrecy. Other search terms included the names of personnel known to be in the bioweapons program and the keywords likely to be in the title of an important document—Iraq's 1989 annual report on its bioweapons program—that was never turned over to inspectors. The preferred search timeframes selected were from 1988 to 1991 and November 1994 to April 1996 because during these time periods, respectively, the Iraqis ramped up the bioweapons program or were urgently scrambling to hide details from the inspectors, who nonetheless gathered sufficient evidence to compel Iraq to admit limited production of biowarfare agents on July 1, 1995. These preliminary searches using tailored search terms did not produce any hits within the database.

Therefore, the July 2011 search activity switched search strategies and employed nineteen relatively generic search terms, such as "biological weapon" and "special weapon," as well as locations and biowarfare agents known to have been part of Iraq's bioweapons program. These search terms produced "hits" in 225 documents across twenty-one categories of the CRRC's Saddam Hussein/ Iraq collection. The majority of hits were in the CRCC categories referred to as the Saddam Tapes, the General Military Intelligence Directorate, Iraqi Intelligence Service, and Miscellaneous. The search terms that drew the most hits were "biological weapon," "biological," and a combined search of "biological" and "Al Muthanna," a facility principally known as the home of Iraq's chemical weapons program. Al Muthanna, as UNSCOM inspectors discovered, also conducted research, development, testing, and filling of biological weapons.

CNS staff reviewed all 225 documents for pertinent information, and they were quickly able to dismiss the lion's share as having no information that would contribute to a more complete history of Iraq's biological weapons program. For instance, a number of documents referred to biological weapons only in passing, with no elaboration whatsoever. CNS staff pulled excerpts from 101 documents for closer scrutiny. The research findings herein are based on those excerpts. A closer reading of these documents provided, as the report elaborates, some interesting insights into how Iraqi decision makers weighed their interactions with UNSCOM as they attempted to hide as much of the bioweapons program as possible. In addition, the documents bring to light a few technical specifics about the program itself. However, as one might expect given the small percentage of documents that comprise the current CRRC database of translated documents, a majority of the original research questions remain unanswered.

A repeat search at a later date using all of the pertinent specific and generic terms—when the CRRC database contains far more translated documents—could yield a much larger number of relevant

documents than resulted from the July 2011 search. However, it is also possible that the relevant biological program documents were not recovered, or that the Iraqis were so intent on burying the bioweapons program that they deliberately destroyed these documents, as the Iraqis claimed was the case. After all, when Iraq turned over 700,000 documents to UNSCOM in mid-August 1995, the overwhelming majority pertained to Iraq's chemical, nuclear, and missile programs. From what came to be known as the Haidar farm cache, only one small box consisted of biological documents, mostly reprints of published scientific articles.<sup>2</sup>

#### **R**ESEARCH FINDINGS

I wo rationales dictated the manner in which the research findings from the CRRC database are presented in this report. First, the database yielded information pertinent only to select aspects of the Iraqi bioweapons program, not its totality. Therefore, the findings are organized in a rough chronological order to allow for the events covered to be presented in a logical, efficient manner. For similar reasons, the findings are grouped under topic headings that allowed documents relevant to a certain subtopic to be considered together.

#### Morality after the Fact

In 1991, Iraq began making declarations as called for in the ceasefire terms for the 1991 Gulf War (UN Security Council Resolution 687), but UNSCOM treated these declarations as sensitive and confidential, not publicly releasing the overwhelming majority of their contents even as the inspectors' search for evidence to confirm or refute the declarations generated headlines worldwide. One of the more intriguing Iraqi documents, dated February 27, 2002, concerns an evaluation of an Iraqi Intelligence Service's proposal to the National Monitoring Directorate—the entity formed in 1991 to interact with UNSCOM inspectors—to publish Iraq's full, final, and complete declarations on its weapons of mass destruction and missile programs.<sup>3</sup> With fears of renewed military intervention by coalition forces as a backdrop, the Iraqi Intelligence Service was banking that the detailed declarations might sway international opinion that Iraq had told the truth and really had eradicated its unconventional arsenal.

Once UNSCOM destroyed Al Hakam, one of Iraq's principal bioweapons production facilities, in mid-1996, Iraq sought to preserve its bioweapons expertise and assigned its core bioweaponeers to work at the National Monitoring Directorate. Thus, this February 2002 document features the assessment of two of Iraq's foremost bioweaponeers as to the advisability of making Iraq's biological declaration public. For a variety of reasons, these two senior bioweaponeers concluded that only 5 percent of the biological declaration could be published. For instance, they rightly point out that the biological declaration is chock-full of technical detail, much of which would not be comprehensible to policy makers and the general public. Therefore, the two bioweaponeers argued that, after reading the declaration, the target audiences would be in no position to conclude whether or not the declaration buttressed Iraq's claim that it no longer had biological weapons. Second, the declaration names individuals, including ministers, and companies that supplied materials and equipment to the bioweapons program. Iraq's leader, Saddam Hussein, was adamantly opposed to naming names, as he states in a taped conversation discussed later in this report. Accordingly, the two bioweaponeers posit

that the revelation of the identities of those who managed and performed this work and the entities that facilitated the program would be damaging.

In addition, the two bioweaponeers point out that the declaration would (1) coach its readers in the procedures and methodologies needed to conceal evidence of a bioweapons program, and (2) that it "gives, teaches, informs, and clarifies the scientific and accurate methods for how to produce biological agents for military purposes, starting with research and development and ending with the weaponization." Thus, the capstone argument that the pair make for not publishing the declaration is that doing so would violate the Biological and Toxin Weapons Convention (BWC), which Iraq signed in 1971 and ratified in 1991 after its defeat in the Gulf War. Quoting the BWC, the pair warns against publication, since Article III of the BWC specifically enjoins member states not to "help or encourage" the acquisition of these weapons "by any means." After these introductory statements, the two bioweaponeers present a section-by-section breakdown of the declaration that corroborates their main arguments.<sup>4</sup> Of course, these two bioweaponeers leave unstated another motivation for recommending that the declaration remain unpublished, namely to protect those involved in Iraq's bioweapons program from further public scrutiny and possible punishment.

Setting aside the irony of having two known bioweaponeers cleave to the BWC in the aforesaid manner, this document resurrects one of the perennial questions about how Iraq attempted to hide its bioweapons program in the open, namely why the Iraqis did not simply present their activities as a defensive research effort, which the BWC allows. Before August 2, 1991, when UNSCOM's first biological inspection team arrived in Iraq, Baghdad denied having any semblance of a bioweapons program. After a pointed inquiry from UNSCOM, Iraq noted that it had about a dozen facilities with biological equipment in the country. That story changed radically on the evening of August 2, when the head of the National Monitoring Directorate, Hossam Amin, told the inspectors that Iraq had a program of military biological research involving three biological agents, but that it never produced any weapons. He then asked Dr. Rihab Taha, who Amin said led this program, to elaborate this statement. What Taha described lacked the hallmarks of a defensive research program, so the chief inspector, Dr. David Kelly, asked for clarification, such as whether the Iraqis engaged in various standard biodefense activities. In reply, Taha noted that they had tested Bacillus anthracis, Clostridium botulinum, and Clostridium perfringens to determine how much of the agent would be needed to kill fifty percent of those exposed, an experimental activity somewhat at odds with defense research. At one point in this exchange, Amin specifically noted that their work was not defensive. Over the course of UNSCOM's first biological inspection, the Iraqis repeatedly fumbled this important defensive/offensive distinction.<sup>5</sup>

Before UNSCOM conducted its first inspections, Iraqi leaders made a decision to forfeit the majority of Iraq's chemical weapons program but to conceal their more advanced poison gas capabilities and their nuclear and biological weapons programs. Presumably, Amin and Taha were attempting to implement that policy, which begs the question of whether they were, at that point, either ignorant of the BWC's provisions, assuming that UNSCOM's inspectors would be amateurs, simply inept at implementing the concealment and deception strategy, or some combination of these factors. In this opening interview, the Iraqis gave the inspectors a thread

to pull. While that admission was by far not the only error that the Iraqis made in their efforts to keep Iraq's biowarfare secrets, it was indeed a critical mistake that set the inspectors from the outset on a course to unravel Iraq's bioweapons program.

Along the same morality-after-the-fact lines, another document reveals the Iraqi Intelligence Service quashed a scientist's request in 2000 to make biowarfare agents to contaminate the water supplies of US forces based in Kuwait and Saudi Arabia.<sup>6</sup> Throughout history, scientists, whether out of a sense of patriotic duty or simply to obtain more funding for their work and status, have proposed that their governments develop objectionable weapons. Iraqi intelligence officials decline this scientist's proposal for several reasons, first because chemical poisons available in large quantities are easier to use for such a mission than viruses and bacteria, which are "difficult from a security, practical, and logistic aspect." The stated rationale to steer clear of germ warfare also includes the "very dangerous" political and military "repercussions" for the use of such weapons. Iraqi intelligence officials tell the applying scientist that UN Security Council resolutions ban such activity, and that "current directors from the political leadership does (sic) not allow handling it because if found it would cause a grave political problem for Iraq." Therefore, the letter instructs this scientist to cease and desist from this type of work and to destroy anything he produced, "including material and documents" that could be very troublesome if found. Finally, Iraqi intelligence officials remind this scientist that if Iraq decided "to carry out an operation of this kind the material required can be found in the local markets."<sup>7</sup> In short, Iraq has a less objectionable means available to achieve the same ends.

#### Obfuscating Iraq's Weaponization of Biowarfare Agents

After Iraq admitted in July and August 1995, respectively, to producing and weaponizing biowarfare agents, the vacillations in its verbal and written declarations to UNSCOM made it very challenging for UNSCOM inspectors to confirm the accuracy of statements regarding the quantities of agents and simulants Iraq produced, how much agent and simulant were consumed in testing activities, how many bombs and warheads were filled with which agents, and how those munitions and bulk agents were destroyed. Iraq first claimed to have destroyed its biological arsenal prior to October 1990, later amending that destruction date to the summer of 1991. The interrelationship of all of these pieces of the program was such that when the Iraqis changed one aspect of their declaration, or when the inspectors found evidence that disproved another facet, it called into question all the other pieces.

Several factors vastly complicated the ability of the inspectors to confirm the delivery system piece of the puzzle alone. First, over time, Iraq also gave different numbers for how many R-400 bombs it manufactured, what chemical and biological agents they contained, and how many it had destroyed. Second, Iraq provided very little documentation related to the bioweapons program. For example, Al Nasr State Establishment produced Iraq's R-400 bombs. To document that the Al Nasr State Establishment had destroyed 308 bombs that were never filled with chemical or biological agents, the Iraqis gave the inspectors a receipt that Al Nasr State Establishment sent to Al Muthanna. Other than the sender and the recipient organizations, the receipt said only "melt," with no indication whatsoever of how many of what item were involved.<sup>8</sup>

In addition to its use as a delivery system for biowarfare agents, the Iraqis also widely used the R-400 bomb as a poison gas-delivery system. After August 1995, the Iraqis declared that they filled 200 R-400 bombs with biowarfare agents but later switched that number to 166 and then to 157. Iraq claimed to have built 200 R-400-As, the variant of the munition that Iraq tailored to a biological weapons fill, with a blue epoxy internal coating and purportedly marked with a black external stripe to indicate a fill of *B. anthracis* or *Clostridium botulinum*, the agents that cause anthrax and botulinum toxin. Iraq then retracted that statement, saying that it produced only 175 R-400-As after they determined that aflatoxin did not react well to the epoxy coating, and they instead used standard R-400s for the aflatoxin delivery system.<sup>9</sup>

A document in the CRRC database shows the extent to which the Iraqis went to create some sort of written record of their accounts of the R-400 and R-400-A bombs for UNSCOM.<sup>10</sup> Numerous sections of this multi-part document are often marked "secret and personal," perhaps hoping that the inspectors would find documents thus branded to be more authentic. However, the inspectors quickly determined that one of Iraq's ploys was the frequent use of fabricated documents to try to fool UNSCOM. The Iraqis often dismissed the inspectors' complaints when the forgery was caught with the excuse that the real documents were destroyed during the war. In this instance, the first document in the series, which may or may not have been given to UNSCOM, plainly states that it was assembled "for the purpose of showing the truth" about the R-400 and R-400A bombs with recreated documents "regarding the matters to which no documentations (sic) were obtained due to their destruction during the aggression, or have been damaged after the aggression."<sup>11</sup> Whereas the numbers in this document align quite neatly with the verbal accounts and declarations provided to UNSCOM, a real paper trail hardly ever lines up so precisely. Another factor that raises suspicions about the authenticity of the data in the document is the bareness of what is provided, often just the number of the item and a terse description of its status.

In this manner, the documentation states that the Al Nasr plant made 1,034 R-400 bombs and sent them to Al Muthanna for chemical agent fills. Via Al Muthanna, Al Hakam received another 200 bombs for biological agent fills. At Al Hakam, the bomb bodies and tails were assembled after the Air Force prepared the bomb tails. One recreated document, dated August 14, 1990, contains the minutes of a meeting between military officers and engineers, who discussed how to clean and inspect the R-400-A, with notations that these munitions were to be painted internally and externally.<sup>12</sup> The notes indicate that two black lines and the symbol R-400-A were to be added to the outside. One segment of this paper trail, along the lines of the aforementioned "melt" note, consists of the handwritten notations from a desk calendar that include, among other details, that UNSCOM destroyed fiftysix bombs, with thirty to thirty-one being R-400s and twenty-five to twenty-six being R-400-As. A voucher dated December 7, 1990, and signed by Al Nasr's marketing manager, states Al Muthanna paid a price of 1,600 dinars apiece for the 200 R-400 Al Tahadi bombs, a total of 320,000 dinars.<sup>13</sup> Another item addressed to the National Monitoring Directorate indicates that Al Nasr's Inspection and Approval Directorate repaired three R-400-A bombs with the serial numbers 2000, 2010, and 4000.<sup>14</sup> The dating of the document, December 19, 1995, is years after the period when Iraq produced, filled, and purportedly destroyed the R-400-As, but coincides with the timeframe in which UNSCOM was pressing Iraq for documentary evidence to buttress its verbal accounts. The dating error makes it easy for even a casual bystander to question the authenticity of this paper trail.

#### Oversight of Biological Activities in Iraq

At first glance, one might assume that anything to do with an ultra-secret bioweapons program might be restricted to the fewest number of individuals in central agencies in Iraq's security apparatus. However, in the case of the Soviet Union, the tentacles of the Soviet bioweapons program crept into bureaucracies characterized as civilian, such as the Ministry of Health, Ministry of Agriculture, Ministry of Chemical Industry, Ministry of External Trade, and Ministry of Medical and Microbiological Industries.<sup>15</sup> Whether the same infiltration of bioweapons-related activities into otherwise civilian bureaucracies took place in Iraq remains unclear. A pair of 1987 memoranda indicates that some governance issues for handling biological and chemical agents within Iraq included a wide crosssection of Iraqi ministries, probably reflecting the need to conduct peaceful, civilian research to find cures for diseases. Such work is often performed in academic laboratories, private companies, and Ministry of Health facilities.

In 1980, Iraq established a committee of representatives from the Ministry of Commerce, the Ministry of Higher Education and Scientific Research, the Ministry of Agriculture, the Ministry of Health, and the Ministry of Heavy Industry to make decisions regarding import/export and proper safety procedures for chemical and biological agents. Because the requisite safety precautions vary for different biological agents, technical experts comprised this committee. The committee's recommendations went to the Minister of the Interior for approval and, if "certain issues" had to be addressed, the scientific department of the Presidential Bureau was also consulted. The National Security Council was sent records of this committee's activities. This inter-ministerial committee also governed the subcommittees within the constituent ministries that directed how biological and chemical agents were to be used. This committee assembled regularly for the oversight and discussion of issues related to biological agents, reviewing each subcommittee's monthly reports on the amount, usage, and storage of biological agents and their proposals concerning biological agents.<sup>16</sup>

The wording of the memoranda does not stipulate whether "certain issues" meant weaponsrelated activities, but apparently all committee representatives reviewed activities and proposals from the Ministry of Defense and the Ministry of Health, the latter of which procured the infamous 39 tons of growth media to fuel Iraq's bioweapons program. UNSCOM inspectors found 22 tons of this growth media, often bearing Ministry of Defense and Technical Scientific Materials Import Division (TSMID) labels. TSMID served as the main procurement entity for other equipment and materials that went into Iraq's bioweapons program, such as spray driers, aerosolization chambers, and fermenters. TSMID was situated organizationally in the Ministry of Trade but reported to the military. Iraq processed most of the "missing" growth media at Al Hakam and the Foot and Mouth Disease Vaccine Plant at Al Daura to make *Bacillus anthracis* and *Clostridium botulinum*.<sup>17</sup> Notably absent on the list of constituent ministries sitting on this review committee was the Ministry of Trade and the Military Industrialization Commission. Saddam Hussein's powerful son-in-law, Lt. Gen. Hussein Kamal Hassan, ran the latter organization, which played a central role in Iraq's weapons of mass destruction programs. Kamal authorized the bioweapons program, which reported to him. Though interesting, this document does not clarify whether this committee governed in whole or in part the procurement activities, safety standards, proposals, or operations of Iraq's biowarfare program. Given the extreme secrecy wrapped around Iraq's bioweapons development, testing, and production activities, an entirely separate committee may have been created to review safety standards, research proposals, procurement matters, and operational standards for the program.

#### Saddam's Views about the Utility of Unconventional Weapons

In discussions with his senior aides, Saddam leaves no doubt that he knows exactly what weapons are at his disposal, why they were created, and who is calling the shots, literally. A transcript of another high-level meeting dated to 1981 confirms that the primary motivation for Iraq's unconventional weapons programs was Saddam's conviction that Iraq would be attacked with these very same weapons. "Baghdad will be attacked chemically, atomically, and by germs," Saddam told subordinates who were trying to equip Iraqi troops with defenses and build bomb shelters for Iraqi civilians. More than once, Saddam stated that Israel possessed every kind of unconventional weapon. He forecast Israeli aggression against Iraq both directly and by proxy. "One day, Israel will provide the Iranians with the know-how to wage a germ and chemical attack," Saddam said, predicting that Israel would goad Iraq's archenemy to attack Iraq with these weapons so as to focus Iraq's resources on Iran, thus better assuring Israel's security.<sup>18</sup>

In remarks to military officers in 1984, Saddam speaks of the advantage of brandishing rather than using a lethal weapon: "[S]ometimes what you get out of a weapon is when you keep saying, 'I will bomb you,' [and] it is actually better than bombing him. It is possible that when you bomb him the material effect will be 40 percent, but if you stick it up to his face the material and the spiritual effect will be 60 percent, so why hit him?" said Saddam. "Keep getting 60 percent!"<sup>19</sup> These comments also gives some insight into why Saddam felt it was worthwhile to deceive UNSCOM inspectors and retain the vestiges of his biological weapons program, despite the continuation of sanctions and the possibility of additional military strikes for defying UN Security Council resolutions demanding Iraq's disarmament and cooperation with the inspectors.

Saddam clearly believed that unconventional weapons embodied power and he relished the military domination that such weapons allowed him to project. With unconventional weapons or the illusion that he still had them, Saddam believed he could hold his enemies at bay, maintain the stability of his regime as the victor in the Iran-Iraq War, and pursue a historical role for Iraq as the leader among Arabs. In fact, his subordinates were so convinced of his desire to hold onto his unconventional weapons that they believed, until after the 2003 Iraq War, that he had some secretly stashed away long after they had been destroyed.<sup>20</sup> Late in 1998, Saddam bluntly told his inner council that was not the case: "I am afraid, comrades, after all I said that you might think we still have hidden chemical weapons, missiles and so forth. We have nothing; not even one screw."<sup>21</sup> Given Saddam's determination, reputation,

and past monologues about the value of unconventional weapons, one could hardly blame those who heard this statement for being skeptical.

One reason Saddam pursued biological and chemical weapons is because he understood their ripple effects. The impact was not only in the immediate death and lingering injuries inflicted, but in what happened to those who survived relatively unscathed. Saddam spoke of how chemical weaponry "exterminates by the thousands," but also "restrains [those attacked]... from leaving the city for a period of time until it is fully decontaminated—nothing; he cannot sleep on a mattress, eat, drink or anything. They will leave [inaudible] naked."<sup>22</sup>

#### Saddam Calls the Shots, Literally

After Kamal's defection to Jordan in early August 1995, he became Iraq's scapegoat for practically everything concerning the biological weapons program. The Iraqis portrayed the bioweapons program as Kamal's pet project, stating that Iraq's senior civilians and military commanders were unaware of it because Kamal's intention was to impress Saddam and the military by revealing the program when it was most needed.<sup>23</sup> One of the Saddam tapes in the CRRC database solidly refutes the notion that Kamal alone orchestrated Iraq's bioweapons program. This tape captures a conversation between Saddam and senior Iraqi officials at the time that the UN Security Council Resolution 678 was being circulated for consideration. Resolution 678, which the Security Council passed on November 29, 1990, authorized the use of force to oust Iraq from Kuwait. In this meeting, Saddam's advisors chat about the weapons that Iraq could use against American forces, including what they refer to as "double chemicals," which may be a reference to the binary form of the nerve agent, sarin.<sup>24</sup> Saddam interjects: "We will hit them with everything [unintelligible]. The Americans asked me themselves and that was broadcasted on American TV. They said, 'Are you going to use chemicals, atomic, and whatever else?' I said to them, 'First of all, we do not have atomic weapons and if we did we would not be ashamed to say it, but in all scenarios, we will not give up Iraq."<sup>25</sup> Whereas Saddam's response to the US press was both evasive and threatening, his privately expressed views about the use of chemical weapons can be seen as a harbinger of his thoughts about biological weapons.

Later in this fall 1990 discussion, Saddam says, "But if we wanted to use chemicals, we will beat them down.... We have discovered a method where the destruction ability is 200 times more than the destruction ability for the same chemical type that we had used against Iran, which means 200 times more destruction energy than what we had used before."<sup>26</sup> Saddam could be referring to the binary nerve agent sarin or to Iraq's VX nerve agent program. VX is more lethal than sarin and tabun, the other nerve agents in Iraq's possession. Either way, the remark shows that Saddam knew the operational capabilities of the weapons in his arsenal.

Continuing to prove that point, Saddam later states in this discussion, "They are saying that the Iraqis had manufactured this bomb. So when they drop it, it will cause all the people to walk around retarded." The transcript notes that people in the room are laughing at this remark, when Saddam continues: "We have superiority in the chemical and in the biological weapons. In the world, there are only two countries on our level or maybe one or maybe none in regards to the quality and quantity.

We have biological weapons that can kill even if you step on it forty years later."<sup>27</sup> Setting aside the bravado in Saddam's statement, these remarks show Saddam's unmistakable awareness that Iraq had a bioweapons program, including some knowledge of the agents Iraq weaponized. The "forty years" characterization is the way that a non-expert might describe the bacteria that causes anthrax, which, in sporulated form, is a very hardy biowarfare agent capable of surviving for decades in the soil. In short, authorization of and knowledge about Iraq's bioweapons program went all the way to the top to Saddam himself, a fact reinforced in other tapes in the CRRC's collection.

Moreover, Saddam left no doubt about who was in control of Iraq's unconventional weapons and gave specific orders for the dispersal of chemical and germ weapons prior to battle. "I am not sure, comrade [name withheld]," Saddam said, "whether or not you know that the chemical weapon cannot be used unless I give an order to use it!"<sup>28</sup>

In the tense days leading into the onset of the 1991 Gulf War, after asking that the door be closed due to the sensitive nature of the conversation, Saddam said he wanted assurance that "the germ and chemical warheads, as well as the chemical and germ bombs, are available to the 'concerned people' so that in case we order an attack, they can do it without missing any of their targets." The phrase "concerned people" refers to field commanders entrusted to deploy and launch Iraq's special weapons. Saddam identified the primary targets for biological and chemical attacks as the Saudi cities of Riyadh and Jeddah, as well as all Israeli cities, particularly Tel Aviv. In this meeting, Saddam had a somewhat testy exchange with Kamal about the availability of Iraq's germ arsenal, stating "I need these germs to be fixed on the missiles…because starting the 15th, everyone should be ready for action to happen at any time." January 15 was the deadline for Iraq to withdraw its forces from Kuwait. Later, Saddam reminds his subordinates to leave no critical assets exposed to Coalition bombs: "I want you to keep in mind that by the 15<sup>th</sup> nothing should be stored in your factories that the 'enemy' can have access to."<sup>29</sup>

With a Coalition attack appearing ever more likely, Kamal hastens to explain to Saddam that biological warheads and bombs had been produced and dispersed to three underground sites that they considered safe, but he warns that these weapons cannot be moved to launch sites within a day. Rather, transportation would take about seven days, and he mentions concerns about possible contamination that could result from the movement of the germ weapons, noting that during development and production, Iraq's bioweaponeers experienced exposure to germs. With that said, Kamal asked Saddam to select which of Iraq's three types of bioweapons he wanted to use, at which point Saddam stipulates "the many years kind." Kamal then reminds Saddam that he also needs to choose a delivery method, observing "there has to be a decision about which method of attack we use: a missile, a fighter bomb, or a fighter plane." To this query, Saddam replies: "With them all, all the methods."<sup>30</sup>

Kamal tries to elaborate the options for a more informed choice, even explaining that "the most harmful effect would come by using planes, like a crop plane, to scatter it. This is, sir, a thousand times more harmful." Saddam, however, wants everything thrown into the fray: "We don't want to depend on one option. The missiles will be intercepted and the planes, at least one will crash, but whenever the missiles or planes fall down over the enemy land, then I consider the goal to be achieved and the mission fulfilled." Of note, Saddam's standard for military success appears to be vastly different from that of political and military leaders who articulate the objective as defeating of the enemy, not crashing of a germ-laden plane on enemy territory. Perhaps Saddam believed confirmation from the crash that Iraq possessed biological weapons would intimidate coalition forces to the extent that it could change the course of the conflict, or perhaps he understood that his armed forces were vastly outmatched and therefore he had no chance of a true military victory. Regardless, he reiterates his "clear order" that Iraq's biological weapons be in the right hands "ASAP" and that he will be the one with release authority, unless he is "not there" and that authority is delegated to someone else. Menacingly and defiantly, Saddam states, "We will never lower our heads as long as we are alive, even if we have to destroy everybody."<sup>31</sup>

Facing a war in which his army was vastly outmatched, Saddam and his advisers spoke with bravado. Some of this bluster was likely to have dissipated following a meeting between Iraqi Deputy Prime Minister Tariq Aziz and US Secretary of State James Baker in Geneva on January 21, 1991. This meeting was last-ditch diplomacy before the deadline for Iraq to remove its troops from Kuwait. Baker did not bother to mince words. He reportedly issued a blunt warning for Aziz to pass along to Saddam, namely that if Iraq were to use chemical and biological weapons in conflict involving US troops, "the American people would demand revenge," noting that the United States had "the means to implement this." As if that warning were not ominous enough, Baker observed that Iraqi use of such weapons would change the US objective in an upcoming conflict from ousting Iraqi forces from Kuwait to defeating Saddam's regime. Lastly, he observed, those responsible for using unconventional weapons "would be held accountable in the future."<sup>32</sup> Baker's warning is widely viewed as the reason that Saddam did not employ his chemical or biological arsenals.

#### Coping with UNSCOM Inspections in the Early Years

The Iraqis had anticipated that UNSCOM would be no more assertive than the initial inspections of the International Atomic Energy Agency, which erroneously gave Iraq's nuclear program a clean bill of health, so the thoroughness and intensity of UNSCOM's inspections apparently took Iraq's hierarchy by surprise.<sup>33</sup> Soon after the onset of UNSCOM inspections, one of the CRRC tapes captures Saddam being told by his advisors that inspectors are swarming all of Iraq's factories and that a U-2 aircraft, which the United States put at the disposal of UNSCOM, is taking overhead images. The one positive note in the briefing is that Iraqi soldiers have recovered an apparently intact US cruise missile, probably fired during Operation Desert Storm. Bristling at the imposition of the inspections, Saddam boasts that he will shoot down the U-2 and insist that any Americans or British working as UNSCOM inspectors will be barred from Iraq. Of the cruise missile, he directs that it be dismantled to "see what's in it.... We'll give a copy of it to the Russians," he says. "Send to the comrade the study on the cruise missile."<sup>34</sup> Long allied with Moscow, Saddam was willing to do it a favor, perhaps hoping that during the tough days ahead, Russia would be equally as generous.

In the initial years of UNSCOM's inspections, Iraq's leadership appears wary of whether UNSCOM Executive Chairman Rolf Ekeus will function as a neutral party or will side with Iraq or its perceived enemies. Saddam notes that Iraq's strategy "will examine to see whether he [Ekeus] wants to end this

crisis or he wants to be a cover to legalize a military-strike on Iraq, and we'll see if the four days [the time Ekeus allotted for a pending visit to Iraq] are reserved to be a real negotiate (sic) or they are the needed time for the bad people to gather their men and supplies." He instructs that Iraq should "practice a pressure on him so he knows that we have our doubts regarding some issues."<sup>35</sup> Whether to let off steam or curry favor with Saddam, badmouthing UNSCOM and its leader, Ekeus, was a ritual part of discussions in Saddam's inner circle. One unidentified speaker asserts that UNSCOM is just playing nonsense games, that the inspectorate makes "things up to bother us and make us not give them anything."<sup>36</sup> In early February 1995, for example, Iraq's Deputy Prime Minister, Tariq Aziz, blasts Ekeus as a coward who dodges questions, implying he is a puppet of the United States.<sup>37</sup> At another point, an unidentified adviser accuses Ekeus of being "shady."<sup>38</sup>

Surprisingly enough, the disrespect among Saddam's coterie may have been encouraged by none other than the UN Secretary-General Boutros Boutros Ghali, who Aziz claims coached him on how to countermand the inspectors by pointing out that Iraq can outnumber UN inspectors by assigning heavy escorts to them and indicating that the inspectors could be bribed. According to Aziz, the Secretary-General said that for every inspector sent into Iraq "you need to hire ten intelligence people. Buy (bribe) them, man. Buy them and pay them; the entire world does it. Why can't you do it?"<sup>39</sup> The idea that a Secretary-General would offer such counsel is disturbing, to say the least, but, more likely, Aziz may have misinterpreted the conversation or exaggerated it to score easy points with Saddam. The topic of how to deal with UNSCOM, both in a generic sense and on specific issues, cropped up frequently in Saddam's inner circle. Aziz, for instance, proposes Iraq play for sympathy, which they frequently did, and ask that the Security Council quicken the intervals at which it evaluated whether sanctions could be lifted. "We should question the length of the process of lifting the sanction(s) and tell the council members that they are depriving the Iraqis from their rights, of their normal rights, so let's make these six months into two stages."<sup>40</sup> Indeed, throughout the Saddam tapes, the participants discuss the full panoply of the tactics of concealment, camouflage, deception, and evasion that they put into play with UNSCOM, including but not limited to telling mistruths, making statements to misdirect the inspectors, intimidating and abusing the inspectors, executing a public propaganda campaign, giving excuses for actions or misbehavior, calling in favors from allies, and exploiting any loopholes and developments to Iraq's advantage. Saddam, for example, recommends that the inspectors should be browbeaten about what Iraq has relinquished and UNSCOM has destroyed, the "missiles, biological researches, chemical weapons, or what is so-called enriched uranium production and armament."41

Iraq's leaders had to grapple with the demands of UN Security Council Resolution 715, which authorized UNSCOM to monitor Iraq on a continuing basis to guard against a relapse to the production of prohibited weapons. For that purpose, UNSCOM requested Iraq's permission to install permanent monitoring equipment (e.g., cameras, sensors) at certain Iraqi facilities. Prior to UNSCOM's installation of on-site monitoring equipment at Iraq's dual-use facilities in 1994, one of Saddam's intimates suggests a stalling, tit-for-tat, argumentative approach: "First...we should consider not rushing this time, we should not comply to their requests immediately, we should do a step-for-step with them, and also we should keep in mind to remain calm. Second, the permanent monitor/

surveillance matter should not be given to them immediately; we must argue them with what we have done so far (sic)." Saddam not only approved of the delay tactic, he urged his subordinates to play it to the hilt. "I prefer for the tactic to take its full course," illustrating the point by directing that, when an UNSCOM inspector requests a meeting with other Iraqis, the standard reply should be "So far, the command has authorized us to meet with you."<sup>42</sup>

UNSCOM's installation of monitoring equipment did not sit well with Saddam, who replies that Iraq needs "an ethical guarantee" from UNSCOM that the facilities being monitored will not be destroyed after the installation of the sensors, indicating a concern that UNSCOM's sensors would really be targeting devices for US or Coalition air strikes. Continuing this line of thought, he instructs that UNSCOM be asked "How are we going to know the way they will be used since they left their location? How can we be sure they will not be used for other purposes than the ones we agreed on?" Saddam wants assurance from UNSCOM that "they are not going to be used for any other purpose." <sup>43</sup> In another conversation about the rigors of UNSCOM's monitoring procedures, Aziz comments: "There are promises that with the passing of time, the methods of surveillance will be changed to a less strict one, matching the one commonly used in previous international treaties and that foreign inspectors will be replaced with Iraqi inspectors. We will spare no effort technically to provide the data and proof that shows our capabilities in this field; so our inspectors and methods of surveillance will replace the foreign ones."44 UNSCOM, which was charged with certifying Iraq's disarmament to the Security Council, would never have pledged to allow Iraq to police itself, so this statement is either a misunderstanding of what UNSCOM representatives said, a bold fabrication to make the future look brighter, or pure wishful thinking on the part of Aziz.

Perhaps illustrating the concept of honor among proliferators, in one taped conversation Saddam observes that UNSCOM keeps pestering Iraq for "the names of individuals, companies and countries you used to deal with" even though the inspectors have other ways of finding out the names of the suppliers for Iraq's prohibited weapons programs, such as by going to the suppliers themselves. Saddam believes that one of UNSCOM's purposes is "to destroy the moral basis for our relations with other nations, countries and individuals." To explain one way this could occur, Saddam tells a lengthy parable about how one friend does not double-cross another friend to others. He explains that, in Arab culture, if one has a problem with someone, they tell the individual directly but they do not betray the integrity of the personal relationship by discussing the situation with someone else. For this reason, Saddam states, Iraq cannot afford to create enemies of its friends by giving up their names to UNSCOM, which opens the possibility that the information might become public. "They are going to try everything, not to mention the fact they destroyed everything they wanted to destroy and said Iraq implemented 95% of the resolutions; isn't that what Ekeus said?" Saddam then insists, "As for the 5%, it might take another ten years without getting results.... But to give them names for all the reasons we mentioned, they will be dreaming to get even one name from us for moral, ethical and humane reasons!"45 Clearly, Saddam's ethical barometer, which approved of the production and use of weapons of mass destruction, could be conveniently adjusted to the purposes at hand.

#### Saddam's Inner Circle Plots to Foil UNSCOM's Biological Investigation

In 1995, Iraq's leaders found themselves in a situation of their own making, having made the decisions to produce biological weapons and then to preserve that weapons capability by hiding the program from UNSCOM. Once UNSCOM began to turn up the heat on Iraq to admit its bioweapons program in early 1995, asking for the reason for purchasing 39 tons of growth media and inquiring what happened to the 17 tons that UNSCOM could not locate, Iraq's leaders frequently discussed in the Revolutionary Command Council how to escape the corner into which they had painted themselves. Some in Saddam's subordinates nudged him to tell the truth about the bioweapons program quickly so that sanctions could be lifted, but others, including Aziz, wanted Saddam to withhold the truth no matter what the costs.

In one conversation, an unnamed male recalls how "our comrades worked very hard after 1991, they worked twenty-six hours in a 24 hour period. They erased everything."<sup>46</sup> For instance, before the inspectors set foot in Iraq, the Iraqis scrubbed Al Hakam from one end to the other, camouflaged certain capabilities, and bulldozed support buildings at Salman Pak that contained key equipment for bioweapons development work, such as a large aerosolization chamber.<sup>47</sup> Noting that Iraq's biological weapons program was smaller than its missile, nuclear, or chemical weapons programs, this individual quips that, at that time, UNSCOM's biological inspection "capabilities turned out to be even smaller than our program. Meaning their experts and equipment and capabilities are too small to deal with the Iraqi program in such a short period of time." This situation, he continues, meant that UNSCOM set the biological portfolio aside until more recently, "when they found out about the materials that we bought, they opened their eyes." This man tells Saddam that UNSCOM obtained the incriminating information a bit at a time, probably finding out about the growth media purchases in the fall of 1994.<sup>48</sup> This time estimate was close; UNSCOM's biological inspectors recalled first being approached by an Israeli with an intelligence tip about a large growth media purchase in the summer of 1994, with the specific number of 39 tons being passed to the inspectors early in January 1995.<sup>49</sup>

In another meeting, a speaker, identified only as "male 2" in the transcript, tries gently to make the case for telling the truth about the bioweapons program:

Right now, Sir, this is a meeting of the highest leadership in our country, we did actually produce biological weapons. It's not a lie to say that we worked in this field. And the material that came here came for this purpose (sic), not for the medical use like we told the Special Committee. So when there's proof, you are a man of law, when there's a case in a court, and there's proof, it leads to the conclusion. So the conclusion that the Special Committee came to is correct... The conclusion said that you imported a large quantity of materials that are used for medical purposes, and at the same time they are raw materials to produce biological weapons. You said it's for medical purposes, using it for medical purposes only requires kilograms not tons. Meaning that the Ministry of Health can use 200 kilograms the entire year for examinations but it doesn't use 37 tons.<sup>50</sup>

For this person to tell the notoriously ruthless Saddam that Iraq's cover story is preposterous and disproved by the Ministry of Health's own statistics was either courageous or foolhardy. Perhaps trying to soften this direct statement with an explanation of how this situation looks from UNSCOM's perspective when Iraq tries to blow off this huge growth media order as a bureaucratic gaffe, he states "[T]hey see some very efficient and accurate actions from us, and they see some mistakes. But when we exaggerate the mistake, they'll say: you guys are efficient and accurate, know exactly how to work a machine, you were able to establish this big military program with little resources, nobody helped you, but you want us to believe that buying 37 tons was by mistake?"<sup>51</sup> This transcript does not indicate that Saddam took a position on the matter.

In another meeting, however, Saddam indicates a preference for continuing to try to dupe UNSCOM. Though he mistakenly calls growth media "agricultural goods" and gets the total quantity involved wrong, Saddam appears inclined to fence with UNSCOM, not to retreat. He states, "Putting forth the explanation of the 17 tons of agricultural goods in the field of biology... we have to give Ekeus a convincing explanation, explaining the 17 tons out of 34 tons."52 In an effort to persuade Saddam to tell the truth, an unidentified attendee raises the speed with which sanctions relief can be obtained. Male 4 states "this subject can be concluded quickly," within weeks, because UNSCOM knows what companies supplied them with how much growth media. Therefore, he says, Iraq's approach should be to tell Ekeus, "We cooperate with you with our efforts and money so you can lift the embargo off of us. If the embargo weren't going to be lifted off of our people, we aren't ready to work with them. What reasons would we have to work with them?" The implied threat to UNSCOM is that the biological file is the only thing standing between Iraq and sanctions relief, and unless Ekeus is going to guarantee the latter, Iraq may stop working with UNSCOM. This individual then recalls that on June 20, Ekeus stated that if Iraq presented the required information on the biological program quickly, UNSCOM would analyze it "relatively fast," so, "at a minimum, the Iraqis should give the Special Committee all the necessary information about the biological program." Reminding Saddam that once they deliver the biological weapons data, Iraq can call on the Russians and French to propose lifting the sanctions, this adviser softens his tell-the-truth advice with the following waffle words: "Sir, I believe that sometimes, politically, open clarity is desired and sometimes ambiguity is desired."53

On the heels of this advice, another male speaker chimes in with the argument that Iraq will win friends if it gets this over with quickly: "The subject of biology, sir president, even if we faced problems. If we don't end this subject that we spoke about, the international community will not be on our side, except for some obstacles here and there, but they won't be on our side like we want them to be, unless we resolve this."<sup>54</sup> This speaker's implied argument is that rumors swirling about a possible continuation of the Iraqi biological weapons program are far worse than admitting Iraq had such a program in the past, but destroyed it.

The next speaker delves into technical details, explaining that UNSCOM had already asked them if Iraq had filled munitions with biowarfare agents. Of course, Iraq's reply was to deny doing so. Saddam is then told that Iraq gave UNSCOM information about how bombs are made, with a material called "Asbest," to buttress that false claim, claiming that the inspectors agreed with this explanation.

Apparently expecting UNSCOM to raise the matter again, this individual states, "We'll say there isn't any biological armament. Biological agents are not used to put into bombs because we don't need to, because the Iraq-Iran [W]ar is over." If Iraq admits to having produced biowarfare agents, he says, they should say that Iraq did not intend to use this as a weapon and destroyed the bulk biological agent before the Gulf War because "it might become dangerous and might pollute."<sup>55</sup> At some point, Saddam found this advice convincing because this is exactly the explanation that Iraq gave UNSCOM when, on July 1, 1995, it confessed to making bulk biological warfare agents.<sup>56</sup>

The conversation evolves with a comment from an anonymous participant that UNSCOM's line of questioning indicated that UNSCOM believed Iraq still possessed biological weaponry. This unnamed adviser is of the opinion that only one of the UNSCOM biological inspectors seems convinced that Iraq went beyond agent production to weaponization because this inspector keeps insisting that, for medical diagnostics, kilogram quantities of growth media, not tons, are required. Trying to brush aside this stubborn inspector, he says the assembled Iraqis "told him stories about the incompetent Minister of Health that we had. We said, "Don't think that we don't have some idiots, we do." At this apparent witticism, the room erupts into laughter that continues as this man regales them with the tale of how he unfurled the story further for the inspectors, stating that a mob took the missing 17 tons of growth media. To the inspector's question of what a mob would do with nutrients suitable to grow biologic agents, he says, "You don't know the mob," before describing how he saw one woman carting off a dentist's chair, another a toilet. "A mob is a mob," he concludes, with those assembled continuing to laugh.<sup>57</sup> Had Saddam's advisors recognized that none of the UNSCOM biological inspectors who heard this tall tale found it convincing, they might not have been so amused.<sup>58</sup>

At this point, the adviser who first argued for telling the truth reminds the group that UNSCOM was just following logic, which would demand the question of why the Ministry of Health purchased and stored almost 40 tons of growth media. "Meaning, if you're an expert, it means you understand. You understand that it's possible for only a small amount to be used in medicine." He further explains that this is exactly why several of the inspectors were asking why, if it was for medical diagnostics, Iraq ordered huge barrels of growth media, not the small the 100-200 gram amounts suitable for laboratory use. Again, the Iraqis told the inspectors this was all the fault of the Minister of Health, and once more the Saddam's council room fills with laughter. The discussion ends with a sobering announcement that in Bahrain, UNSCOM told the press that the missing 17 tons of growth media could make enough biowarfare agent to kill the world's population four times. UNSCOM also informed the press of its concern that Iraq had diverted this growth media into an offensive biowarfare program.<sup>59</sup> As these events unfolded, Iraq's hierarchy found out firsthand the significant role that an inspectorate's pursuit of discrepancies in declarations can play in exposing clandestine activities.

How to resolve the bioweapons program quandary features in another meeting of Iraq's senior officials, where Lt. Gen. Amir Al Sa'adi, Kamal's assistant at the Military Industrialization Commission, tells Saddam that a special UNSCOM team is zeroing in on Iraq's bioweapons program. He says that it is possible to be suspicious of the biological program, especially if Iraq is "dodging everything in regards to it. Therefore...if one does not have anything or have

anything left, for example, one should concentrate on their efforts to achieve results." After noting that the French will side against Iraq in a dispute over a biological weapons program, and that Aziz is so verbally adroit that he could maneuver through anything, he meekly concludes, "I am sorry to say that we are responsible for this subject, I mean, we want to succeed."<sup>60</sup>

Aziz then jumps in as the leading advocate of continuing to stonewall UNSCOM. He argues that if Iraq admits to having produced agent and weapons, then UNSCOM will be obligated to investigate Iraq's past biological weapons program. In prior experience with UNSCOM, when UNSCOM has opened what he calls the "past files," Ekeus's inspectors had not been able to find sufficient proof of anything, so the investigations continued for an extended period of time.<sup>61</sup> Of course, Aziz leaves out that the reason the inspectors find little evidence is because Iraq deliberately destroyed the physical trail of its weapons programs and continues to refuse to hand over the documentation that it retains about these capabilities. Even if it does take time for UNSCOM to sort through Iraq's bioweapons program account and, notwithstanding whatever evidence the inspectors can find, Aziz points out that eventually it will all boil down to a few serious points of dispute between Iraq and UNSCOM. Then, flattering himself, Aziz seconds Al Sa'adi's view that he will have the upper hand in "the serious discussions" because he can be creative and talk his way around anything. Contradicting Al Sa'adi's opinion that the French will oppose Iraq on this matter, Aziz paraphrases the French ambassador's statement to the Security Council in January that "the search for perfection is not a reality, you cannot achieve to a point of a hundred percent in every field." Aziz then observes that Ekeus disagrees with that philosophy, that "Ekeus wants to achieve a hundred percent." So, he argues that if Iraq does not start this file-does not ever admit having a bioweapons program-that it will not take long to shut down the UNSCOM inspections. Complete denial is also the more favorable choice because if Iraq concedes anything, Aziz posits that the British and Americans will make all sorts of other accusations, from human rights to Iraq's old nuclear program. He encourages Saddam to meet with the French foreign minister so that he can personally hear the minister state his belief that Iraq has no weapons left.62

Kamal then enters the exchange, saying that Iraq has yet to clarify anything about its biological weapons program. Therefore, he argues, the best strategy is to play for time because UNSCOM's real problems are with the missile and chemical programs, which are far larger than the biological program. He thinks that UNSCOM has Chinese information about Iraq's missile program, and he knows that since Iraq has not told UNSCOM what chemical weapons it really developed and how many weapons it really used against Iran, the bigger problems are really in these areas. Moreover, Kamal worries that Iraq's concealment effort is not well enough coordinated: "Some of our teams are working in one direction where another team does not know that they are working above in the same direction." On top of that, Kamal does not trust the French, who he says "are playing games, true games." For these reasons, he advises Saddam to "continue to be silent about the issue at hand, ....that it is in our best interest not to uncover it not only in fear of exposing the technology that we have or...to hide it for the future agendas." Finally, he believes that most countries "are now siding with Iraq."<sup>63</sup>

In the event that a country raises issues about a possible Iraqi bioweapons program, Kamal states that "we should be prepared for them, in any way with experts and with locations." He apologetically tells his father-in-law that "the biological program is the…most insignificant problem." If more questions come about the missing 17 tons of growth media, Kamal reports that he and Al Sa'adi had a plan for how to "get out of this problem." The inspectors have crawled all over Al Hakam, he says, looking at "all the air vents, water pipes, even the air, they inspected everything." Kamal then repeats the policy of his father-in-law: "we will confess, but not to the biological program." He concludes that the nuclear program and other matters will be far more problematic, so he exhorts Saddam to "stand firm" on the biological program, that "it is in our best interest to say that it is not true."<sup>64</sup>

Al Sa'adi closes this discussion by predicting that the biological file can be closed and the crux of the matter is whether the controversy will damage Iraq's credibility. While he believes the situation will call Iraq's credibility into question, he observes that Iraq has the advantage because UNSCOM has not been able to prove the information Iraq has presented on the biological program to be untrue. He declares the possibility of UNSCOM finding such proof to be "zero." Indicative of his confidence in his ability to talk his way out of anything and obtain swift relief from sanctions, Aziz asks Saddam to "Let us explain this issue with flexibility on the technical side, while contained under supervision, where we can determine this issue in the least amount of time possible."<sup>65</sup>

#### Iraq's Biological Cover Story Crumbles

How to resolve the pressure UNSCOM's biological inspections were putting on Iraq dominates another Revolutionary Command Council meeting of May 1995, where Aziz notes that Ekeus and his biological team just made a trip to Baghdad. With UNSCOM's evidence about a covert Iraqi bioweapons program having been presented to an international panel of experts and the UN Security Council in April, Ekeus came to Baghdad to meet with Aziz, Minister of Oil Amer Rasheed, and the Minister of the Exterior.<sup>66</sup> By Aziz's account, Ekeus was quite direct because he asserted that Iraq had made biological weapons and asked, "[W]hat was the goal of it, meaning what is the political or security meaning for its production." Aziz indicates that Iraq's technical team was coached to dodge this question: "Of course we had told the technical comrades that when they ask, tell them this is not our job." Then, Aziz states that Ekeus asked "if this quantity [of growth media] was transformed into weapons or not," as well as the timeframes for the production of the weapons and their destruction. "I told him that the strategy for armament that we have was originally developed during the war with Iran," and that Iraq had a simple armament industry with no chemical weapons or missiles. He explained to Ekeus that Iraq built up its armament industry "entirely during the period of war." Saddam's inner circle knew full well that Iraq's unconventional weapons programs continued into 1991, past the end of the Iran-Iraq War. Not persuaded, Ekeus countered that "[1]t is unconceivable that you take such decisions and you pour out this much funds unless you have good objectives [for the bioweapons program]." The UNSCOM inspectors therefore asked: "Where are the beginnings, where are the orders, where are the documents etc.?"<sup>67</sup>

With his reply to the UNSCOM team, Aziz executed Iraq's latest maneuver to try to hold onto the remainder of its bioweapons program. In 1991, Iraq completely denied any biological capability,

and, when UNSCOM's first biological inspection team landed in Iraq, it changed its story to maintaining a military research program useful for defensive or offensive purposes, trying, in other words, to hide the program in the open. Now, Aziz switched to the position that what Iraq did was reasonable under the circumstances. "I said the threat we faced from Iran was an exceptional threat," and that no international referee was arbitrating where the two countries should stop in their conflict. He explained that "Hundreds of thousands of fanatics blind in their minds and in their hearts used to come to us who wanted to die. He would get upset when he does not die. Thus, a threat of this kind." The transcript notes laughter in the room, so apparently the attendees found humor in Aziz's depiction of Iranians as fanatics. "A threat of this kind requires confrontation, I mean special confrontation." Aziz chided Ekeus that a Swede with a bunch of American inspectors should not view Iraq's security perceptions through a European prism. Referring to funding for the weapons programs, when the UNSCOM team said Iraq had to have spent several million dollars and again asked for the paper trail of these transactions, Aziz explained that Iraq handled most planning and document matters with utmost efficiency, but there were two areas of exception. From the beginning of the Iran-Iraq War, the first exception was "the purchase of weapons and military supplies. We became isolated. The Soviet Union cut us off. The ships heading from the Gulf to the port of Al-Qasr were turned back and we entered a war without a source of armament."68

Then, Aziz admits Iraq paid millions in cash for arms, explaining why they cannot document certain purchases:

We, yes, used to give bags, bags we would bring and put a bag in his hand and tell him here are ten million, twenty, fifty million, go get whatever you can, find tanks or artillery or equipment, go bring it, we did this. Not all of this is orderly nor does the Iraqi state work this way, nor all the Iraqi army works this way. But for this performance especially it was required to face the exceptional aggression we encountered. We used to do it...We consider that it was good and necessary and we do not regret it.

Then, Aziz blamed Iran, stating that Iraq is "a state that respected international treaties. But Khomeini was not respecting any international treaty. So I am not supposed to respect international treaties so that Khomeini can come violate my country, and exterminate my people." Warming to this argument, Aziz added Iraq had no choice but to "to protect itself."<sup>69</sup> In short, Aziz resorted to the hackneyed justification that desperate times call for desperate measures.

Having laid the foundation with the justification that Iraq broke the rules because it had no choice, Aziz went further:

I told him so we authorized the workers for the military production that any weapon they could produce, let them produce it. They asked, can we improve the missile? We told them to improve it. They said, can we produce chemical weapons? We told them to produce chemical weapons. They said can we produce biological weapons? We told them to produce biological weapons. Everything that the technicians and experts came and told us that they can produce, we told them, yes, produce it. And we use whatever we use when necessary. The decision for use is a political decision, but the work is absolute.

By his own account, Aziz thus bluntly informed Ekeus that the Iraqi leadership decided to manufacture any weapons its scientists and technicians could make. "Forbidden internationally, not forbidden internationally, a breach to international treaties or not, this is another subject because the party we were facing was an outlawed party, out of the treaties, out of the epoch, out of this planet."<sup>70</sup> Aziz then observed that, when the war with Iran ended, Iraq was not producing biowarfare agents, but decided to make some bulk agent as a "reservoir." However, he claimed, Iraq did not weaponize the agent because "we did not need to…Iran was no longer a permanent danger on us and we had a retaliatory force sufficient for the possibilities of renewing the conflict between us and Iran. So we did not need armament."<sup>71</sup>

Aziz next raised Iraq's justification for making the aforementioned reservoir of biowarfare agent, namely the threat Iraq perceived from Israel. He claimed that anything Iraq made after the end of the 1980s war with Iran was a retaliatory weapon for use against Israel. Aziz reminded Ekeus that "Israel attacked us in '81," referring to Israel's pre-emptive strike against Iraq's Osirak reactor. He argued that "Also Israel has nuclear weapons and this is against international laws and treaties and you cannot tell me that Israel has no biological or bacterial weapons." So, Aziz insisted that Iraq would not apologize for building weapons to deter Israel's nuclear arsenal, and now, as requested, Ekeus had an explanation of "the political thought or for (sic) the philosophy behind the Iraqi military industry."<sup>72</sup>

Returning to the issue that he viewed as Ekeus's primary concern, Aziz stated that "We did not need to change the biological stockpile into weapons because the war with Iran was over. When the war and its possibilities with America came, we destroyed" the bulk agent. He explained Iraq's decision to do this by pointing to the US capability to execute surgical military strikes "against our military and industrial establishments." Well aware of this capability, "We knew and we estimated, as a political leadership, that this stockpile or this weapon cannot be used in this type of conflict because the opposing party possessed a nuclear weapon therefore if you use this weapon, the other party will use it as an excuse to use nuclear weapons against you. Its remainder as a stockpile puts us in danger when it would be hit. So the natural and the rational thinking is that it should be destroyed."<sup>73</sup> In this encounter with Ekeus, Aziz must have believed himself to be a convincing orator/liar because he knew fully that Saddam had ordered the dispersal of biological warheads and bombs going into the 1991 Gulf War.

To Aziz's account of what he told Ekeus, Saddam recalled that "We honestly said that if Israel hits us or thinks of using the nuclear weapons we shall use" chemical weapons against Israel. Agreeing, Aziz states that he told Ekeus just that. "Thus, we did not think of the idea of biological weapons neither before the August events (Kuwait) nor after the August events. Then we found it fit that we destroy it. I told him now not to talk and tell me you altered it into bombs or you did not alter it into bombs."<sup>74</sup> Taking the offensive, Aziz asked Ekeus, "[W]hat is the difference if we altered it or if we did not alter it? Does Iraq have in your belief hidden biological weapons?" Aziz tried to intimidate Ekeus by saying it would be "a humiliation to your intelligence and a humiliation to your competency as head of the special committee when someone comes and tells you 'no' Iraqis are hiding, like, biological weapons. You have, for four and a half years, been working all over Iraq, with no place that you haven't dug and this type of propaganda has appeared previously." Pressing his case, Aziz continued, "In '93 didn't you come telling us that there are reports saying that there are hidden missiles?" Aziz triumphantly tells Saddam that he then claimed that Iraq didn't keep anything prohibited by Resolution 687 and threatened that Iraq would quit cooperating with UNSCOM unless sanctions were lifted.<sup>75</sup>

Throughout his meeting with Ekeus, Aziz was walking a delicate line, simultaneously acknowledging the existence of a bioweapons program but denying that Iraq fabricated actual biological weapons. Worried that Kamal would disclose Iraq's weaponization of biowarfare agents after his defection on August 7, 1995, Iraq rushed to disclose this dimension of its bioweapons program before Kamal could do so, summoning Ekeus back to Baghdad for its second major biological confession on August 17-18, 1995. Kamal, however, revealed little to the inspectors about Iraq's bioweapons program that they did not already know or suspect.<sup>76</sup>

In the end, the school of thought that Iraq should stonewall UNSCOM over the biological weapons program won the day, as Iraq's subsequent interactions with UNSCOM demonstrated. Iraq consistently admitted only as much as it thought the inspectors knew, insisting with each new admission, no matter how slight, that they had told the entire truth and that therefore sanctions should be lifted. From the outset, it was clear that Iraq was anxious to have UNSCOM out of Iraq for good, but increasingly it was also obvious Baghdad was feeling the pinch of sanctions. Nonetheless, even after the Iraqis confessed to weaponization in mid-August 1995, they reverted to their prior obfuscating behavior after Kamal returned to Baghdad early in 1996. Unable to confirm Iraq's declarations, UNSCOM could not certify to the UN Security Council that Iraq no longer possessed prohibited weapons, so the sanctions continued to be upheld.<sup>77</sup>

The consequences of this strategy, however, began to wear thin with Iraq's leader. On one tape from a meeting likely to have taken place in the 1996-97 timeframe, a disgruntled Saddam is complaining that the inspections will never end, that sanctions relief could never come: "Our position is clear and just and" if UNSCOM proceeds "as they please, then this means they can do whatever they want with Iraq for the next fifty years using the excuse that they are looking for possibilities, with repetition, because the special committee will not inspect one site and then leave, they will repeat twenty times at the same site and that they have new information (sic). This would never be over." To rectify the situation, Saddam suggests international minders for the inspectors. "In our evaluation, the security council has to be present to watch the movement of the special committee to prove to Iraq that the Council is serious about implementing their resolutions in regards to its duty toward Iraq. And they should not let the special committee or certain persons within it act as they did in the beginning with Iraq and instigate us. This is it."<sup>78</sup> In late 1997, Iraq raised a ruckus, arguing even more forcefully than it had in the past that UNSCOM inspections constituted an intrusion on Iraq's sovereignty. They designated locations in Iraq such as Saddam's palaces and facilities under the control of the Republican Guard and Special Security Organization to be "sensitive sites," balking at UNSCOM requests to inspect such locations. In February 1998, UN Secretary-General Kofi Annan came to Baghdad to meet with Saddam to break the stalemate, and Annan agreed to send diplomatic escorts with the inspectors. Of course, with plenty of time to clear these sites of incriminating evidence prior to their arrival, these UNSCOM teams found nothing.<sup>79</sup>

Saddam may have felt that he had the upper hand in the aforementioned meeting with Annan. He told his senior aides that Annan requested the meeting, accepted his terms, which included calling the upcoming activities an "entrance" to Iraq, not an "inspection" or "visit," and blessed his proposal to allow the "entrances" for a period of four months to clear up outstanding ambiguities about Iraq's declarations. Annan and Saddam both saw this as a "gentleman's agreement." A subordinate of Saddam's added that Annan agreed that he personally would select the experts from UNSCOM and the International Atomic Energy Agency for these special teams. This individual continues to say that, unlike the procedures employed by the UNSCOM "jerks," special procedures should be established for these teams. He proposed that the inspectors be barred from requesting documents, that they have to split any samples taken with Iraq so that they could not "cheat," that every inspector be accompanied by at least one Iraqi escort, and that the "entrances" be notified in advance, not conducted without notice.<sup>80</sup> Leaving aside the fact that UNSCOM's sampling protocol already required the splitting of samples, these terms of inspection hobbled the inspectors to an untenable degree.<sup>81</sup> After many years, Saddam's war of attrition against UNSCOM had paid considerable dividends. Over the next several months, the international community's sympathy for the humanitarian crisis in Iraq would cause political support for UNSCOM to erode, eventually resulting in the replacement of UNSCOM with a successor inspectorate that had a weaker mandate.

#### Lessons on Survival in Saddam's Iraq

The defection of a high-ranking official from within a state's national security apparatus can set off all sorts of aftershocks. To begin with, while countries at odds with the defector's home state will court the defector for information about the regime's real capabilities and intentions, the defector's home nation will rush to pinpoint the critical information the defector is likely to reveal and how to minimize any resulting vulnerabilities. On August 7, 1995, Kamal Hassan fled to Jordan. His defection prompted Iraq to admit that Iraq weaponized biowarfare agents because Iraq's hierarchy feared that Kamal would spill this secret, among others, to UNSCOM and the states that debriefed him.<sup>82</sup>

One of the lesser-discussed aftershocks of a defection is what happens to those who worked alongside the defector. Saddam's track record of ruthlessly punishing anyone he thought could harm his interests gave Iraqi citizens and even Saddam's intimate advisors good reason to fear the man. A report that Hossam Amin, the director of the National Monitoring Directorate, filed just after Kamal's defection gives insight into the realities of life in Saddam's Iraq. Probably trying to avoid reprisal that could befall Kamal's associates, Amin confesses in his letter that on July 26, 1995, Kamal asked him to prepare a report for Kamal's eyes only detailing the facets of Iraq's biological, nuclear, and missile programs that Iraq had not revealed to UNSCOM. Amin gave Kamal the requested report two days later. The report stipulated that Iraq had not divulged to UNSCOM the weaponization of biowarfare agents into missiles and bombs, the commandeering of Al Daura Foot and Mouth Disease Vaccine Plant for the production of biowarfare agents, and the true destruction timeframe for the biowarfare arsenal and bulk stocks in the summer of 1991. That destruction timeframe contradicted the fall of 1990 destruction date Iraq gave UNSCOM on July 1, 1995. Amin added that Kamal knew that the Special Security Organization was responsible for collecting and moving from point to point the central technical and operational archives of Iraq's biological, nuclear, chemical, missile, and supergun programs, though Amin believed that Kamal did not know the individuals directly responsible for this activity or where the documents were hidden.<sup>83</sup>

Days after Amin wrote this letter, on August 20, 1995, he played a central role in casting Kamal as the scapegoat for all sorts of Iraqi misdeeds. On August 20, 1995, Amin insisted that Ekeus—about to depart Iraq to debrief Kamal—detour to a farm supposedly owned by the traitorous defector. There, Ekeus "discovered" trunks loaded with over 700,000 documents about Iraq's unconventional weapons programs, though only one small box contained records pertinent to the biological weapons program. According to Ekeus's recollection of this visit to Kamal's farm, Amin tried unsuccessfully to make an enthusiastic case that Kamal was the one who had orchestrated the hiding of Iraqi documentation from the inspectors.<sup>84</sup>

In his report about his pre-defection dealings with Kamal, which, according to the document, reached Saddam's desk at the request of Saddam's son, Qusay, Amin related how Kamal "on so many occasions behaved in a manner which created tension" with UNSCOM. Specifically, Amin states that in 1991, Kamal issued orders not to provide information that UNSCOM requested and was "absolutely" against revealing the bioweapons program, despite the fact US intelligence had already published some details about the program gained from a former employee of Al Hakam who defected to Saudi Arabia.<sup>85</sup> Amin's attempt to blame the policy of withholding information on the biological weapons program on Kamal alone, when Saddam and his inner circle knew that a high-level committee established this policy before UNSCOM inspections began speaks to Amin's despiration at this critical time. Amin's description of well-developed US intelligence knowledge about Iraq's bioweapons program is also quite an exaggeration.

Prior to the 1991 Gulf War, US intelligence had no knowledge of the existence of Al Hakam, as demonstrated by the fact that coalition bombers did not strike this target. In the spring of 1994, an UNSCOM inspector reviewing the files about UNSCOM's biological inspections found an intelligence tip about Project 324 being somehow linked to the Iraq's bioweapons program, but the tip contained no information about this site's location, size, or function within the program. From their first trip to Al Hakam in September 1991, UNSCOM inspectors suspected that Al Hakam was part of the bioweapons program. In early 1995, the inspectors uncovered, through interviews and documentary evidence, that Project 324 was the codename for Al Hakam. Among many other shortcomings,

Western intelligence had no idea, until Iraq's mid-August 1995 admission, that Iraq had weaponized or was even trying to develop aflatoxin, which causes liver disease, as a biowarfare agent.<sup>86</sup>

Feeling intense pressure from learning that he unknowingly armed Kamal, just prior to his defection, with information that could damage Iraq, Amin lists over a dozen Iraqi officials who worked with Kamal—many of them individuals of senior rank. He then proceeds to recommend that they be investigated for reasons such as not speaking openly, drunkenness, and sympathizing with communists and sectarians.<sup>87</sup> Amin's tactic of diverting attention to others belies his fear of retaliation from Saddam for having handed Kamal the very data the defector needed to swiftly establish his credibility with UNSCOM and to demand favors from the intelligence agencies that debriefed him.

Theories about Kamal's defection abound because, even though he was one of Saddam's intimates, related by marriage, he was shot when he returned to Iraq in February 1996. In a nutshell, some speculated that Russia and France were so angered by Iraq's July 1 admission of having a bioweapons program—a reversal after years of denial—that Kamal decamped to Jordan because he was blamed for this disclosure fiasco. Others believed that Kamal defected because he wanted more power, possibly even to overthrow Saddam, a theory given credibility by statements Kamal made to his debriefers and to the press. A third school of thought held that Kamal was the sacrificial lamb to allow Iraq to come clean on the bioweapons program, which seemed plausible because, despite knowing firsthand Saddam's mercilessness, he nonetheless returned to Iraq, suggesting that his defection was a planned ruse. In other words, under this hypothesis, Kamal thought he would be welcomed back to Baghdad.<sup>88</sup>

In this document, Amin lends credibility to the camp that Kamal was power hungry. He states his belief that Kamal had been plotting "his flight and treason" since he returned from a development conference in Russia. He adds that, due to "his sick mind and his arrogance," Kamal thought he would be the next person "elected to the country's Command Leadership Council." Amin then tattles that Kamal passed out large rewards and honors to general managers, with gifts such as tractors, harvesters, and large sums of cash, "to pave the way for his election to the Command Council." Amin grounds his theory about the defection in Kamal's letters to Saddam, claiming he had resolved the sanctions dilemma and points to Kamal's failed projects that had "no viable economic value" or were unable to produce the promised number of missiles, artillery, and even furniture. He derides Kamal's Military Industrialization Commission by reporting that its factories were "partially assembled from here and there," cobbled together "from other establishments." Amin's capstone is the assertion that "All these projects and others that he did not declare did not have any effect, but to increase inflation and expenses," an argument bound to hit home years into the hardship of sanctions. Kamal's projects, Amin concludes "did not have any benefit except to satisfy his arrogance and his feelings of pride." Further driving home this point, Amin states that it is "very necessary" to make it clear that Kamal was not "the source of blessings, achievements, and acknowledgment, but just the opposite," and that everyone should "know that he exploited the blessings of the president and the blessings of the revolution for his mean and dishonest purposes and to satisfy his own arrogance."89 Thus, Amin includes in his report a second diversion that could refocus Saddam's attention away from any role Amin might have played in the revelation of secrets that Saddam ordered kept at all costs. Amin continued to head the National Monitoring Directorate, so the distraction ploy apparently worked.

Amin, of course, had plenty of company when it came to blaming Kamal for everything, including the delay in lifting sanctions. When senior Iraqis met with Ekeus, an unnamed Iraqi states that Kamal blocked Iraq's intention in April 1994 "to work to close the biological file" when "he started to create problems" with that plan at that time. The Iraqi "leadership didn't have any suspicion" that Kamal "was conspiring against his leadership and his people" and had the details about everything. "Thus he was in a position to destroy our strategy after July 1994," at which time Kamal "was planning to escape, thus it was good for him to damage the leadership's efforts."90 In a meeting of Saddam and his subordinates, Aziz took the opportunity to simultaneously attack Kamal and Ekeus as the creators of the prolonged sanctions debacle. He accuses Ekeus of "relying on lies that were said by" Kamal "when he was in Amman. He [Kamal] said that Iraq is hiding missiles and Iraq is hiding this and that and so on and on ....Where do they hide it? They hide it in the Republican Guard buildings and in the Special Guard and The Private Intelligence Apparatus." Then, Aziz says, this is the excuse for Ekeus to demand searches of such sites, which "he knows very well, first it will anger us. We will refuse and scream and therefore he will confuse us." He contends that, even after searching such sites, Ekeus will be unsatisfied, that "[H]e will say that this person moved it from the site and he took it to his house. This will give him delay and also it will give him the chance to disturb the relationship between us and the Security Council and to ruin our position and image."91 Aziz recounts how in a meeting with Ekeus, he told the chief inspector that "there may be mistakes here and there or discrepancies, and these are resulted from the disturbances that happened as the result of the runaway of traitor (sic)" Kamal. Then, perplexingly, Aziz claimed responsibility for delaying UNSCOM's pursuit of clarity in Iraq's biological declaration in 1994 and said that he ordered everything biological destroyed.<sup>92</sup> The Iraqis were clearly operating on the principle that the best target for blame is the individual who is not present to defend himself.

#### Aziz Champions the Cause<sup>93</sup>

As Iraq's primary spokesman for many years, Aziz applied himself to the task with tenacity, using each and every tool at his disposal to defend Iraq's interests, to fence with UNSCOM, and to bring about a cessation of both UNSCOM's inspections and the UN sanctions. A draft of a letter written by Aziz in early October 1997 to the UN shows Aziz's persistence and bravado as Iraq's public relations chief. In the letter, Aziz compiles a point-by-point rebuttal of issues UNSCOM raised in a report about Iraq's compliance with UN resolutions that require Iraq's disarmament and cooperation with monitoring and inspections. For example, Aziz characterizes UNSCOM's statement that "The inspection teams discovered several undeclared pieces of dual purpose equipment, and contradictions in Iraqi declarations" as "completely unfair because all of the inspection teams (especially the biological team) often present new and extreme pronouncements when the team leader is changed." The comment insinuates that the inspectors are to blame for Iraq's incomplete and inaccurate declarations because they are unprofessional, unreasonable, and inconsistent. Aziz asserts that the National Monitoring Directorate, which is responsible for interfacing with the inspectors, "handles the situation professionally" and insists that the equipment the inspectors uncover is "always located in sites included in the inspection." Using italics to emphasize his point, Aziz trumpets that the undeclared equipment has "been right under the inspectors' noses for many years." Never mind that Iraq was under obligation to report the equipment concerned and often did not do so.

Later in the letter, Aziz also claims that Iraq gave UNSCOM "an enormous amount of documentation," much of which was "first rate and can settle the issue in question. Still the Special Committee experts do not consider these documents conclusive and still ask for more documents." As an example of UNSCOM's unreasonableness, he described a document Iraq gave UNSCOM that was dated January 15, 1991, from the general manager of the Technical Research Center to his boss, Kamal. In this document, Kamal mentions Al Hakam's stocks of biowarfare agents. Aziz implies that a logical person would consider this document authentic and sufficient proof of the extent of Iraq's production of biowarfare agents because one of the Technical Research Center's "missions was the production of biological agents in al-Hakam factory (sic)." Then, Aziz complains that UNSCOM's biological inspectors insist on more documentation.

Noting that a missile warhead loaded with anthrax, or, more accurately, the bacteria that cause anthrax, would contain "several million lethal doses that can be spread in any attack on any city in the area," Aziz describes how UNSCOM went to "extraordinary" lengths to confirm the elimination of Iraq's missile capabilities. Next, he states that UNSCOM "knows that the special missile warheads were all destroyed in 1991. This was confirmed in 1992," and he writes that UNSCOM in June 1995 presented the issue as closed. As though it was a matter of little importance, he writes that "nothing new on the subject has appeared after August 1995 except that several warheads that were previously declared as chemical were [actually] filled with biological material." Well aware of the activities that Iraq performed to implement their strategy to hide the bioweapons program from the inspectors, Aziz pens an incomplete sentence about how Iraq spared no effort to assist UNSCOM in clarifying the missile issue "through several methods like documentations, interviews, and inventorying the remnants of what had been destroyed," the very weapons that Iraq blew up unilaterally in the first place to mask the truth. Iraq, of course, left plenty of its old chemical weapons out in the open for UNSCOM's inspectors to find because Iraq's use of poison gas during the 1980s war with Iran set this known arsenal up as the perfect sacrifice for the inspectors as Iraq tried to conceal its nuclear and biological programs.

Continuing that UNSCOM has pursued clarification in 1997 to confirm whether all of the warheads were destroyed, Aziz audaciously complains that after UNSCOM's initial account of these warheads in 1992, the inspectors did not request that Iraq keep the warhead remnants. Indeed, he implies that it was UNSCOM's fault that the remnants were in disarray in "far and exposed locations" because UNSCOM "subjected" the remnants "to several interferences such as digging by those searching for metals." Again, Aziz conveniently omits that Iraq reluctantly blew up its biological bombs and missiles to eliminate evidence of its bioweapons program. To certify the elimination of Iraq's unconventional weapons capabilities, UNSCOM was obligated to determine how many missile warheads were filled with what type of biological and chemical agents. Such matters to Aziz are apparently irrelevant because he states that missile warheads, "whether traditional, biological or chemical, have no operational military value without the transporter and launcher," asserting that UNSCOM already verified their destruction, but leaving unstated that there were still discrepancies in that account as well. Pushing his case, Aziz concludes: "So, do we wait several months for these 'warheads' to be accounted for in order for the Council to know that the requirements of Resolution 687...have been met?!"

On the remaining unsettled issues with regard to *B. anthracis* and VX production, Aziz observes that Iraq "suggested that the matter be settled scientifically by holding symposia of specialists, scientists and manufacturers." He posits that "any scientist, manufacturer and weapons expert knows that these chemical and biological components cannot now be used as (weapons) because it has been more than six years since they were produced." Depending on the caliber and the method of production, that assertion is easily questioned.

Using the Arabic spelling of Kamal's name, Aziz's next claim is that "The only thing that might be of value is the al-Hakam factory that Husayn Kamil changed into an industrial protein factory. The purpose of the change was not to maintain a biological production capability because the factory has been declared to the Committee since 1991 and has been included in the inspections since." Aziz made an error raising this particular matter in a letter written in 1997, because Al Hakam was destroyed in mid-1996. Perhaps he was borrowing from his standard litany of complaints against UNSCOM. Either way, Aziz is brazen to portray Al Hakam as an innocuous facility since the Iraqis previously confessed to UNSCOM that Kamal ordered Al Hakam built in secret for the purpose of making biowarfare agents. When Baghdad decided to try to hide its bioweapons program in the open, the Iraqis made up the single cell protein activity as a cover story to try to keep the facility intact. The Iraqis later set up the biopesticide line at Al Hakam, which was drying the known anthrax simulant *Bacillus thurengiensis* to a particle size of less than ten microns, a probable cover for developing capabilities to freeze dry and aerosolize biowarfare agents. This ultra-fine particle size is ideal for dispersal of biowarfare agents but totally ineffective for manufacturing a biopesticide of sufficient weight to stick to plants.<sup>94</sup>

This series of impudent arguments impressively demonstrates the falsehoods Aziz and other Iraqis perpetrated to further Iraq's interests. One reason to continue spinning lies unabashedly is that those who were not totally informed about the history of Iraq's unconventional weapons programs and UNSCOM's inspections might find just enough credibility in Iraq's assertions to feel some sympathy for Baghdad. Perhaps even more impressively, this draft letter contains a mere fraction of the fabrications that UNSCOM encountered from Aziz and his cohorts.

#### Conclusions

In the months and years ahead, the documents of the CRRC will continue to yield many insights into the inner workings of Saddam's Iraq. For the time being, the documents thus far available related to Iraq's biological weapons program offer enticing and informative glimpses into the views of Iraq's hierarchy regarding germ weaponry and the actions authorized to keep this most secret of Iraq's unconventional weapons programs under wraps. Along the way, the documents forever strip bare a few of the cover stories the Iraqis spun to try to insulate their leader from any assertion that he was not involved in the nasty business of biological weapons.

In two ways, the Iraqis tried to set Kamal up as the patsy for Iraq's bioweapons program—asserting that he orchestrated the program without the knowledge of his superiors and that he was responsible for cloaking the program from everyone. The tapes of Saddam and his cronies irrefutably show

that Saddam knew all about his germ weapons program and even gave specific, scorched-earth commands when Kamal asked him how this arsenal should be used during the 1991 Gulf War. Rather than turn to one type of biowarfare agent and one type of delivery system, he wanted all agents and all methods of delivery thrown into battle. Furthermore, on several occasions, the tapes record Saddam's extended discussions with his senior staff about how to use various ploys to fool UNSCOM inspectors about the bioweapons program.

Other documents in the CRRC collection provide insights into the façades at play in Saddam's Iraq. One document pulls back the curtain on the belated morality of Iraqi bioweaponeers as they justify not releasing Iraq's biological declaration by arguing that the Biological and Toxin Weapons Convention would prohibit revealing the information it contains. Another document illuminates how Iraq fabricated records, providing the paper trail that the Iraqis fashioned to try to show UNSCOM that Iraq made only so many R-400 bombs specifically for biological weapons fill and that Iraq destroyed the R-400 bombs that were not filled with germ or chemical agents. Offering a sad window into the machinations of Saddam's lieutenants, Amin's confessional letter to Saddam on the heels of Kamal's defection palpitates with the fearful atmosphere surrounding Saddam, where top officials and ordinary Iraqis knew they could fall prey to Saddam's henchmen. A second letter, Aziz's draft litany of complaints to the United Nations, captures Saddam's chief spinner rolling out one justification after another in a determined attempt to portray Iraq as the victim of unjust persecution, and not a state that tried every means possible to acquire weapons of mass destruction and then hid the essential components of those weapons programs from UNSCOM so that they could be resurrected after the departure of the inspectors. Thus, with a relatively small number of documents related to Iraq's bioweapons activities, the CRRC database reveals some of the ugly reality of what really transpired within that weapons program. One can only hope that the translation and addition of additional documents to the CRRC database will make it possible to learn even more about Iraq's biological weapons program.

#### **ENDNOTES**

(1) A fairly complete library of UNSCOM reports can be found online at <www.un.org/Depts/unscom/ unscmdoc.htm>, the reports of the United Nations Monitoring, Verification, and Inspections Commission are available at <www.unmovic.org/>, and the Iraq Survey Group's report is *Comprehensive Report of the Special Advisor to the DCI on Iraq's WMD* (Washington, DC: Central Intelligence Agency, 30 September 2004). Overviews of Iraq's program can also be found elsewhere, such as, Milton Leitenberg, *Biological Weapons Arms Control*, Project on Rethinking Arms Control Paper No. 16 (College Park, MD: Center for International and Security Studies at Maryland, May 1996), pp. 22-38; Graham S. Pearson, "The Iraqi Biological Weapons Program," in Mark Wheelis, Lajos Rozsa, and Malcolm Dando, eds., *Deadly Cultures: Biological Weapons since 1945* (Cambridge, MA: Harvard Univ. Press, 2004), pp. 169-90.

(2) Amy E. Smithson, *Germ Gambits: The Bioweapons Dilemma, Iraq and Beyond* (Stanford, CA: Stanford Univ. Press, 2011), pp. 100-02, 114-17.

(3) "2002 Iraqi Intelligence Service IIS Proposal, Military Industrialization Commission Analysis, and National Monitoring Directorate (NMD): Rejection of a plan to publicize WMD activities; Criticism of FFCD Reports," CRRC doc. SH-MICN-D-000-777, February-April 2002.

(4) Ibid.

(5) Smithson, Germ Gambits, pp. 36-38.

(6) "Scientific ideas prepared by Biologist Employee [name deleted] raising producing viruses and germs for the purpose of polluting the water tanks for the US camps in Kuwait and Saudi Arabia," CRRC doc. IISX-D-001-105, October 22, 2000.

(7) Ibid.

(8) Smithson, Germ Gambits, pp. 142-43.

(9) Ibid., pp. 142, 145.

(10) "Military Industrialization Commission correspondence Regarding the Production of the R 400 Bomb," CRRC doc. SH-MICN-D-000-945, date of origin estimated as 1990-1995.

(11) Ibid.

(12) Ibid.

(13) Ibid.

(14) Miscellaneous memos concerning activities dealing with warheads and chemical materials," CRRC doc. SH-MICN-D-000-743, estimated date range October 1987-December 1995.

(15) On the organization of the Soviet Union's bioweapons program, see: Ken Alibek with Stephen Handleman,

Biohazard (New York: Random House, 1999): pp. 293-304; Milton Leitenbery, Raymond A. Zilinskas, The Soviet Biological Weapons Program: A History (Cambridge: Harvard Univ. Press, 2012), pp. 16-281.

(16) "Memos from the National Security Council to Saddam Hussein regarding Communication Security, Handling and Controlling of Biological and Chemical and Installations Security," CRRC doc. SH-RVCC-D-000-348, 30 August 1987 and 28 September 1987.

(17) Smithson, Germ Gambits, pp. 69-72, 78-80, 91-92, 98.

(18) Also in this transcript, Saddam, who later ordered chemical weapons use against Iraqi civilians, directed his minister of housing to continue constructing bomb shelters, to stock gas masks in stores for civilian purchase, and to instruct civilians on the proper use of protective equipment and precautionary measures. "Saddam and His Senior Advisers Discussing Israel's Attack on the Tamus (Osirak) Reactor and Iraqi Civil Defenses," CRRC doc. SH-SHTP-A-001-039, dated mid- to late-1981. Of interest as well, Saddam and Palestinian leader Yasser Arafat chat about Israel's nuclear arsenal in mid-April 1990, with Saddam bragging that chemical weapons could be the route whereby Palestine could be returned to the Arabs. Saddam said: "Iraq has chemical weapons and successfully used them on the Iranians and therefore, Iraq won't think twice about striking Israel with chemical weapons." "Saddam Meeting with Iraqi Officials, Yasser Arafat, and the Palestinian Delegation," CRRC doc. SH-SHTP-A-001-037, April 19, 1990.

(19) "Saddam and Air Force Officers Discussing the Movements and Performance of the Iraqi Air Force During the Iran-Iraq War," CRRC doc. SH-SHTP-A-001-035, July 7, 1984.

(20) Smithson, Germ Gambits, pp. 30-31.

(21) "Saddam and His Advisers Discussing United Nations Rules and the UN Security Council," CRRC doc. SH-SHTP-A-001-198, undated, approximately November 1998. Saddam made a similar remark in 1995 when questions arose as to whether Iraq had destroyed its biological weaponry. "We don't have anything hidden," he says. "Meeting between the former Iraqi President Saddam Hussein and his Members of Command, including Tariq Aziz," CRRC doc. SH-SHTP-D-000-990, dated 1995.

(22) "Saddam and Ba'ath Party Members Discussing the Iran-Iraq War," CRRC doc. HS-SHTP-A-001-023, March 6, 1987.

(23) Smithson, Germ Gambits, pp. 99-101, 128.

(24) Iraq turned to this approach for sarin because Iraq's unitary nerve agents quickly lost their potency as the result of a stabilization problem with the pre-mixed agent. In binary weapons, the two final components of sarin are stored separately and mixed at the last moment to achieve full potency.

(25) "Saddam and the Revolutionary Command Council Discussing Potential War with United States," CRRC doc. SH-SHTP-A-000-848, dated 1990.

(26) Ibid.

(27) Ibid.

(28) "Saddam and Ba'ath Party Members Discussing the Iran-Iraq War," CRRC doc. HS-SHTP-A-001-023, March 6, 1987.

(29) Central Intelligence Agency, "Regime Strategic Intent," in *Comprehensive Report of the Special Advisor to the DCI on Iraq's WMD*, vol. 1 (Washington, DC, September 30, 2004), pp. 97-100.

(30) Ibid.

(31) Ibid.

(32) Lawrence Freedman and Efraim Karsh, *The Gulf Conflict: Diplomacy and War in the New World Order* (Princeton Univ. Press: 1993), p. 257.

(33) Smithson, Germ Gambits, p. 27.

(34) "Revolutionary Command Council Meeting Attended by Saddam Hussein and High Ranking Military Commanders," CRRC doc. SH-SHTP-A-000-786.

(35) "Saddam Hussein and his Advisors Discussing the Rules of the UN Security Council," CRRC doc. SH-SHTP-A-001-198, date unknown.

(36) "Meeting between the former Iraqi President Saddam Hussein and his Members of Command, including Tariq Aziz," CRRC doc. SH-SHTP-D-000-990, dated 1995.

(37) "Saddam Hussein and High Ranking Officials discussing Iraqi Biological and Nuclear Weapons Programs," CRRC doc. SH-SHTP-A-001-011, May 2, 1995.

(38) "Meeting between the former Iraqi President Saddam Hussein and the members of command, including Tariq Aziz," CRRC doc. SH-SHTP-A-000-990, dated 1995.

(39) "Saddam and Top Political Advisers Discussing Relations with the UN Security Council," CRRC doc. SH-SHTP-A-001-143, January 1, 1996.

(40) "Saddam and his cabinet contemplate the results of their efforts concerning the lifting of sanctions and resolution 715," CRRC doc. SH-SHTP-A-000-873, undated, after Persian Gulf ceasefire.

(41) "Saddam Hussein and his Advisors Discussing the Rules of the UN Security Council," CRRC doc. SH-SHTP-A-001-198, date unknown.

(42) Ibid. In another conversation in mid-June 1996, a point at which Iraq was stonewalling attempts by UNSCOM to send in an inspection team to conduct interviews to clarify outstanding issues regarding Iraq's declarations, Saddam and Aziz have another brief exchange about how to get UNSCOM to swallow their current version of the truth so that the biological file can be closed and sanctions can be lifted. "Meeting between President Saddam Hussein and a group of Iraqi officials in which they discuss UN Security Council Resolutions, Sanctions," CRRC doc. SH-SHTP-A-000-904, date 1996.

(43) "Saddam Hussein and his Advisors Discussing the Rules of the UN Security Council," CRRC doc. SH-SHTP-A-001-198, date unknown.

(44) "Saddam and his cabinet contemplate the results of their efforts concerning the lifting of sanctions and resolution 715," CRRC doc. SH-SHTP-A-000-873, undated, after Persian Gulf ceasefire.

(45) "Saddam Hussein and his Advisors Discussing the Rules of the UN Security Council," CRRC doc. SH-SHTP-A-001-198, date unknown. The notion that UNSCOM could have found out about Iraq's procurement by consulting suppliers apparently resonated with Saddam because he made an almost identical statement on another occasion: "But they could find out about these materials faster than the other things that they discovered because we bought them from the [W]est." "Saddam Hussein Meeting with the Revolutionary Council," CRRC doc. SH-SHTP-D-000-814, dated May 2, 1995. From the outset, UNSCOM made requests of nations for any pertinent information related to equipment and materials used in Iraq's prohibited weapons programs, receiving in return varying degrees of cooperation. When this request was made for suppliers to the bioweapons program early in 1995, several countries put UNSCOM in direct contact with the companies concerned, the overwhelming majority of which cooperated extensively with the inspectors. Smithson, *Germ Gambits*, pp. 76-77. See also, the annotation for these pages posted at <www.sup.org/ancillary.cgi?isbn=08047 75532&item=Annotation.html>.

(46) "Saddam Hussein Meeting with the Revolutionary Council," CRRC doc. SH-SHTP-D-000-814, dated May 2, 1995.

(47) Smithson, Germ Gambits, pp. 44-46, 95.

(48) "Saddam Hussein Meeting with the Revolutionary Council," CRRC doc. SH-SHTP-D-000-814, dated 2/5/1995.

(49) Smithson, Germ Gambits, p. 76.

(50) "Saddam Hussein Meeting with the Revolutionary Council," CRRC doc. SH-SHTP-D-000-814, dated May 2, 1995. Note that growth media ordered for use in hospital diagnostic tests normally comes in small packets containing 100-200 grams of media, not in huge barrels that, once opened, would spoil long before the contents were used in small quantities for such tests. As the speaker notes, Iraq's own Ministry of Health statistics for annual use nationwide reported requirements of 200 kilograms for hospital diagnostics. Smithson, *Germ Gambits*, pp. 79-80, 86-87.

(51) "Saddam Hussein Meeting with the Revolutionary Council," CRRC doc. SH-SHTP-D-000-814, dated May 2, 1995.

(52) "Meeting between the former Iraqi President Saddam Hussein and his Members of Command, including Tariq Aziz," CRRC doc. SH-SHTP-D-000-990, dated 1995.

(53) Ibid.

(54) Ibid.

(55) Ibid.

(56) Smithson, Germ Gambits, p. 92.

(57) "Meeting between the former Iraqi President Saddam Hussein and his Members of Command, including Tariq Aziz," CRRC doc. SH-SHTP-D-000-990, dated 1995.

(58) Smithson, Germ Gambits, pp. 80-88.

(59) "Meeting between the former Iraqi President Saddam Hussein and his Members of Command, including Tariq Aziz," CRRC doc. SH-SHTP-D-000-990, dated 1995.

(60) "Saddam Hussein and High Ranking Officials Discussing Iraqi Biological and Nuclear Weapons Programs," SH-SHTP-A-001-011, dated May 2, 1995.

(61) Ibid.

(62) Ibid.

(63) Ibid.

(64) Ibid.

(65) Ibid.

(66) Smithson, Germ Gambits, pp. 88-90.

(67) "Saddam Hussein Meeting with the Revolutionary Council," SH-SHTP-D-000-760, dated May 2, 1995.

(68) Ibid.

(69) Ibid.

(70) Ibid. Note that at this time, Iraq was not a member of the BWC, which entered into force in 1975, and the companion treaty banning poison gas, the Chemical Weapons Convention, did not enter into force until 1997. Due to its use of chemical weapons in the 1980s war with Iran, Iraq was generally believed to be a violator of the 1925 Geneva Protocol, which prohibits the use of germ and chemical weapons. Iraq acceded to the Geneva Protocol in 1931. The text of Iraq's reservation to the Geneva Protocol can be found at: <www.icrc.org/ihl.nsf/NORM/69D792340F5DBAD1C1256402003F73B4?OpenDocument>. The UN Secretary-General dispatched multiple teams to investigate the use of chemical weapons during the 1980s war, concluding that such weapons were indeed used. For more, see Jez Littlewood, "Investigating Allegations of CBW Use: Reviving the UN Secretary-General's Mechanism," *Compliance Chronicles*, no. 3 (December 2006), pp. 14-15.

(71) "Saddam Hussein Meeting with the Revolutionary Council," SH-SHTP-D-000-760, dated May 2, 1995.

(72) Ibid.

(73) Ibid.

(74) Ibid.

(75) Ibid.

(76) Smithson, Germ Gambits, pp. 97-103, 108-14.

(77) Ibid., pp. 119-46.

(78) "Saddam Hussein and Iraqi Commanders Discussing Weapons Inspections and how the United States intends to continue the Sanctions on Iraq," CRRC doc. SH-SHTP-D-000-797, date unknown. The other conversation on the tape and Saddam's proposal for escorts indicates this meeting was probably conducted during the 1996-97 timeframe.

(79) Smithson, Germ Gambits, pp. 155-57.

(80) "Saddam and Advisers Discussing the Economic Sanctions Imposed on Iraq in 1998 and Possible UN Inspections," CRRC doc. SH-SHTP-A-000-785, undated, approximately February 1998.

(81) Alan J. Mohr, "Biological Sampling and Analysis Procedures for the United Nations Special Commission (UNSCOM) in Iraq," *Politics and the Life Sciences* 14 (August 1995), pp. 240-43.

(82) Smithson, Germ Gambits, pp. 97-100.

(83) "Report from Husam Mohammad Amin, Director of the National Monitoring Directorate about Hussein Kamel, CRRC doc. SH-INMD-D-000-657, August 13, 1995.

(84) Smithson, Germ Gambits, 100-102, pp. 114-17.

(85) "Report from Husam Mohammad Amin, Director of the National Monitoring Directorate about Hussein Kamel, CRRC doc. SH-INMD-D-000-657, August 13, 1995.

(86) Specifically, the Iraqis divulged their weaponization of aflatoxin on August 19, 1995. Smithson, Germ Gambits, pp. 16-21, 81, 99-100, 174.

(87) "Report from Husam Mohammad Amin, Director of the National Monitoring Directorate about Hussein Kamel, CRRC doc. SH-INMD-D-000-657, August 13, 1995.

(88) Smithson, Germ Gambits, pp. 117-18.

(89) "Report from Husam Mohammad Amin, Director of the National Monitoring Directorate about Hussein Kamel, CRRC doc. SH-INMD-D-000-657, August 13, 1995.

(90) "Meeting minutes from meeting between Tariq Aziz and Rolf Ekeus regarding Iraqi chemical and nuclear programs," CRRC doc. MISC-D-000-772, dated September 1995.

(91) "Saddam Hussein and Iraqi Commanders Discussing Weapons Inspections and how the United States intends to continue the Sanctions on Iraq," CRRC doc. SHTP-D-000-797, date unknown.

(92) "Meeting minutes from meeting between Tariq Aziz and Rolf Ekeus regarding Iraqi chemical and nuclear programs," CRRC doc. MISC-D-000-772, dated September 1995.

(93) All quotes and the characterization of the content in this section of the report were drawn from "Drafts Of A Letter Written By Tariq Aziz To The UN," CRRC doc. SH-MISC-D-000-476, October 9, 1997.

(94) Smithson, Germ Gambits, pp. 66, 72-73, 78.

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