# PART ONE: LOOKING BACK

The President asked this Commission to perform two tasks: to assess the intelligence capabilities of the United States with respect to weapons of mass destruction "and related threats" of the 21st century, and to recommend ways to improve those capabilities. Part One of this report details our findings in connection with the first of these two objectives.

In order to assess the Intelligence Community's capabilities, we conducted a series of case studies that are reported in separate chapters of this report. Three of these case studies—Iraq, Libya, and Afghanistan—concern countries that were specified by the President. Each provided an opportunity that is all too rare in the uncertain world of intelligence: namely, to compare what the Intelligence Community believed about a country's unconventional weapons programs with the "ground truth." With respect to Iraq, the President asked us to compare the Intelligence Community's pre-war assessments about Iraq's weapons programs with the post-war findings of the Iraq Survey Group—and to analyze why the pre-war assessments were so mistaken. He also instructed us to perform similar "before and after" reviews of the Intelligence Community's performance in assessing the unconventional weapons programs of Libya before its government's decision to forfeit them, and of Afghanistan before the Operation Enduring Freedom military campaign. The first three chapters of this report detail our findings on each of these countries.

The Executive Order establishing this Commission also asked us to look for lessons beyond those provided by our reviews of these three countries, instructing us to examine the Intelligence Community's capabilities with respect to the threats posed by weapons of mass destructions in the hands of terrorists and in "closed societies." In response to these directives, we have examined the Intelligence Community's progress in improving its counterterrorism capabilities since the September 11 attacks. We also looked at the qual-

ity of our intelligence on the nuclear weapons programs of North Korea and Iran, although we regret that we are unable to discuss our findings in an unclassified format.

In sum, we include four of these case studies in this report—Iraq, Libya, Afghanistan, and Terrorism—and we draw heavily upon the lessons we learned from all of them in proposing recommendations for change in Part Two of this report. These case studies are not the only basis for our recommendations, however. We also reviewed the Intelligence Community's current capabilities with respect to other critical countries—such as China and Russia—and examined special challenges facing the Intelligence Community, such as that of integrating intelligence across the foreign-domestic divide, and of improving our counterintelligence capabilities. While our examination of these issues did not lead to separate written case studies, we use evidence gathered from these and other areas of our review of the Intelligence Community in explaining the recommendations we make in Part Two of this report.

# CHAPTER ONE
# CASE STUDY: IRAQ

## INTRODUCTION

As war loomed, the U.S. Intelligence Community was charged with telling policymakers what it knew about Iraq's nuclear, biological, and chemical weapons programs. The Community's best assessments were set out in an October 2002 National Intelligence Estimate, or NIE, a summation of the Community's views.[1] The title, *Iraq's Continuing Programs for Weapons of Mass Destruction*, foretells the conclusion: that Iraq was still pursuing its programs for weapons of mass destruction (WMD). Specifically, the NIE assessed that Iraq had reconstituted its nuclear weapons program and could assemble a device by the end of the decade; that Iraq had biological weapons and mobile facilities for producing biological warfare (BW) agent; that Iraq had both renewed production of chemical weapons, and probably had chemical weapons stockpiles of up to 500 metric tons; and that Iraq was developing unmanned aerial vehicles (UAVs) probably intended to deliver BW agent.

These assessments were all wrong.

This became clear as U.S. forces searched without success for the WMD that the Intelligence Community had predicted. Extensive post-war investigations were carried out by the Iraq Survey Group (ISG). The ISG found no evidence that Iraq had tried to reconstitute its capability to produce nuclear weapons after 1991; no evidence of BW agent stockpiles or of mobile biological weapons production facilities; and no substantial chemical warfare (CW) stockpiles or credible indications that Baghdad had resumed production of CW after 1991. Just about the only thing that the Intelligence Community got right was its pre-war conclusion that Iraq had deployed missiles with ranges exceeding United Nations limitations.

How could the Intelligence Community have been so mistaken? That is the question the President charged this Commission with answering.[2]

We received great cooperation from the U.S. Intelligence Community. We had unfettered access to all documents used by the Intelligence Community in reaching its judgments about Iraq's WMD programs; we had the same access to all of the Intelligence Community's reports on the subject—including the articles in the President's Daily Brief that concerned Iraq's weapons programs. During the course of our investigation, we and our staff reviewed thousands of pages of documents—ranging from raw operational traffic produced

by intelligence operators to finished intelligence products—and interviewed hundreds of current and former Intelligence Community officials.

We also drew on the labors of others. The Butler Commission report on the quality of British intelligence was an important resource for us, as was the work of Australian and Israeli commissions. The careful and well-researched July 2004 report of the Senate Select Committee on Intelligence on this topic was particularly valuable.

This report sets out our findings. For each weapons category, it tells how the Intelligence Community reached the assessments in the October 2002 NIE. It also offers a detailed set of conclusions. But before beginning, we offer a few broader observations.

## An "Intelligence Failure"

### Overall Commission Finding

The Intelligence Community's performance in assessing Iraq's pre-war weapons of mass destruction programs was a major intelligence failure. The failure was not merely that the Intelligence Community's assessments were wrong. There were also serious shortcomings in the way these assessments were made and communicated to policymakers.

For commissions of this sort, 20/20 hindsight is an occupational hazard. It is easy to forget just how difficult a business intelligence is. Nations and terrorist groups do not easily part with their secrets—and they guard nothing more jealously than secrets related to nuclear, biological, and chemical weapons. Stealing those secrets, particularly from closed and repressive regimes like Saddam Hussein's Iraq, is no easy task, and failure is more common than success. Intelligence analysts will often be forced to make do with limited, ambiguous data; extrapolations from thin streams of information will be the norm.

Indeed, defenders of the Intelligence Community have asked whether it would be fair to expect the Community to get the Iraq WMD question absolutely right. How, they ask, could our intelligence agencies have concluded that Saddam Hussein *did not* have weapons of mass destruction—given his history of using them, his previous deceptions, and his repeated efforts to obstruct

United Nations inspectors? And after all, the United States was not alone in error; other major intelligence services also thought that Iraq had weapons of mass destruction.

We agree, but only in part. We do not fault the Intelligence Community for formulating the hypothesis, based on Saddam Hussein's conduct, that Iraq had retained an unconventional weapons capability and was working to augment this capability. Nor do we fault the Intelligence Community for failing to uncover what few Iraqis knew; according to the Iraq Survey Group only a handful of Saddam Hussein's closest advisors were aware of some of his decisions to halt work on his nuclear program and to destroy his stocks of chemical and biological weapons. Even if an extraordinary intelligence effort had gained access to one of these confidants, doubts would have lingered.

But with all that said, we conclude that the Intelligence Community could and should have come much closer to assessing the true state of Iraq's weapons programs than it did. It should have been less wrong—and, more importantly, it should have been more candid about what it did not know. In particular, it should have recognized the serious—and knowable—weaknesses in the evidence it accepted as providing hard confirmation that Iraq had retained WMD capabilities and programs.

## How It Happened

The Intelligence Community's errors were not the result of simple bad luck, or a once-in-a-lifetime "perfect storm," as some would have it. Rather, they were the product of poor intelligence collection, an analytical process that was driven by assumptions and inferences rather than data, inadequate validation and vetting of dubious intelligence sources, and numerous other breakdowns in the various processes that Intelligence Community professionals collectively describe as intelligence "tradecraft." In many ways, the Intelligence Community simply did not do the job that it exists to do.

Our review revealed failings at each stage of the intelligence process. Many past discussions of the Iraq intelligence failure have focused on intelligence analysis, and we indeed will have much to say about how analysts tackled the Iraq WMD question. But they could not analyze data that they did not have, so we begin by addressing the failure of the Intelligence Community to collect more useful intelligence in Iraq.

There is no question that collecting intelligence on Iraq's weapons programs was difficult. Saddam Hussein's regime had a robust and ruthless security system and engaged in sophisticated efforts to conceal or disguise its activities from outside intelligence services—efforts referred to within the Intelligence Community as "denial and deception." The United States had no Iraq embassy or official in-country presence; human intelligence operations were often conducted at a distance. And much of what we wanted to know was concealed in compartmented corners of the Iraqi regime to which few even at high levels in the Iraqi government had access.

Still, Iraq was a high-priority target for years, and the Intelligence Community should have done better. It collected precious little information about Iraq's weapons programs in the years before the Iraq war. And not only did the Community collect too little, but much of what it managed to collect had grave defects that should have been clear to analysts and policymakers at the time. Indeed, one of the most serious failures by the Intelligence Community was its failure to apply sufficiently rigorous tests to the evidence it collected. This failure touched all the most salient pieces of evidence relied on by our intelligence agencies, including the aluminum tubes, reporting on mobile BW, uranium from Niger, and assertions about UAVs.

One of the most painful errors, however, concerned Iraq's biological weapons programs. Virtually all of the Intelligence Community's information on Iraq's alleged mobile biological weapons facilities was supplied by a source, codenamed "Curveball," who was a fabricator. We discuss at length how Curveball came to play so prominent a role in the Intelligence Community's biological weapons assessments. It is, at bottom, a story of Defense Department collectors who abdicated their responsibility to vet a critical source; of Central Intelligence Agency (CIA) analysts who placed undue emphasis on the source's reporting because the tales he told were consistent with what they already believed; and, ultimately, of Intelligence Community leaders who failed to tell policymakers about Curveball's flaws in the weeks before war.

Curveball was not the only bad source the Intelligence Community used. Even more indefensibly, information from a source who was *already known* to be a fabricator found its way into finished pre-war intelligence products, including the October 2002 NIE. This intelligence was also allowed into Secretary of State Colin Powell's speech to the United Nations Security Council, despite the source having been officially discredited almost a year earlier. This

communications breakdown could have been avoided if the Intelligence Community had a uniform requirement to reissue or recall reporting from a source whose information turns out to be fabricated, so that analysts do not continue to rely on an unreliable report. In the absence of such a system, however, the Defense Intelligence Agency (DIA), which disseminated the report in the first place, had a responsibility to make sure that its bad source did not continue to pollute policy judgments; DIA did not fulfill this obligation.

Lacking reliable data about Iraq's programs, analysts' starting point was Iraq's history—its past use of chemical weapons, its successful concealment of WMD programs both before and after the Gulf War, and its failure to account for previously declared stockpiles. The analysts' operating hypothesis, therefore, was that Iraq probably still possessed hidden chemical and biological weapons, was still seeking to rebuild its nuclear weapons program, and was seeking to increase its capability to produce and deliver chemical and biological weapons. This hypothesis was not unreasonable; the problem was that, over time, it hardened into a presumption. This hard and fast presumption then contributed to analysts' readiness to accept pieces of evidence that, even at the time, they should have seen as seriously flawed.

In essence, analysts shifted the burden of proof, requiring evidence that Iraq did *not* have WMD. More troubling, some analysts started to disregard evidence that did not support their premise. Chastened by the effectiveness of Iraq's deceptions before the Gulf War, they viewed contradictory information not as evidence that their premise might be mistaken, but as evidence that Iraq was continuing to conceal its weapons programs.

The Intelligence Community's analysis of the high-strength aluminum tubes offers an illustration of these problems. Most agencies in the Intelligence Community assessed—incorrectly—that these were intended for use in a uranium enrichment program. The reasoning that supported this position was, first, that the tubes *could* be used in centrifuges and, second, that Iraq was good at hiding its nuclear program.

By focusing on whether the tubes could be used for centrifuges, analysts effectively set aside evidence that the tubes were better suited for use in rockets, such as the fact that the tubes had precisely the same dimensions and were made of the same material as tubes used in the conventional rockets that Iraq had declared to international inspectors in 1996. And Iraq's denial and deception

capabilities allowed analysts to find support for their view even from information that seemed to contradict it. Thus, Iraqi claims that the tubes were for rockets were described as an Iraqi "cover story" designed to conceal the nuclear end-use for the tubes. In short, analysts erected a theory that almost could not be disproved—both confirming and contradictory facts were construed as support for the theory that the tubes were destined for use in centrifuges.

In the absence of direct evidence, premises and inferences must do. Analysts cannot be faulted for failures of collection. But they can be faulted for not telling policymakers just how little evidence they had to back up their inferences and how uncertain even that evidence itself was. The October 2002 NIE and other pre-war intelligence assessments failed to articulate the thinness of the intelligence upon which critical judgments about Iraq's weapons programs hinged.

Our study also revealed deficiencies in particular intelligence products that are used to convey intelligence information to senior policymakers. As noted above, during the course of its investigation the Commission reviewed a number of articles from the President's Daily Brief (PDB) relating to Iraq's WMD programs. Not surprisingly, many of the flaws in other intelligence products can also be found in the PDBs. But we found some flaws that were inherent in the format of the PDBs—a series of short "articles" often based on current intelligence reporting that are presented to the President each morning. Their brevity leaves little room for doubts or nuance—and their "headlines" designed to grab the reader's attention leave no room at all. Also, a daily drumbeat of reports on the same topic gives an impression of confirming evidence, even when the reports all come from the same source.

The Commission also learned that, on the eve of war, the Intelligence Community failed to convey important information to policymakers. After the October 2002 NIE was published, but before Secretary of State Powell made his address about Iraq's WMD programs to the United Nations, serious doubts became known within the Intelligence Community about Curveball, the aforementioned human intelligence source whose reporting was so critical to the Intelligence Community's pre-war biological warfare assessments. These doubts never found their way to Secretary Powell, who was at that time attempting to strip questionable information from his speech.

These are errors—serious errors. But these errors stem from poor tradecraft and poor management. The Commission found no evidence of political pressure to

influence the Intelligence Community's pre-war assessments of Iraq's weapons programs. As we discuss in detail in the body of our report, analysts universally asserted that in no instance did political pressure cause them to skew or alter any of their analytical judgments. We conclude that it was the paucity of intelligence and poor analytical tradecraft, rather than political pressure, that produced the inaccurate pre-war intelligence assessments.

## The Iraq Study

This case study proceeds in two parts. The study first details the stream of pre-war intelligence assessments, from the Gulf War to Operation Iraqi Freedom, and compares those to the post-war findings of the Iraq Survey Group. That comparison is provided for each weapons type—nuclear, biological, chemical, and their delivery systems—and also for the political context in Iraq during this time period. For each of these sections, the report also offers the Commission's findings, which often identify specific flaws that led to the inaccuracies in the assessments. The study then identifies the overarching conclusions about the collection, analysis, and dissemination of intelligence that we drew from our examination of the Intelligence Community's performance on the Iraq WMD question.

## NUCLEAR WEAPONS

### Nuclear Weapons Summary Finding

The Intelligence Community seriously misjudged the status of Iraq's alleged nuclear weapons program in the 2002 NIE and other pre-Iraq war intelligence products. This misjudgment stemmed chiefly from the Community's failure to analyze correctly Iraq's reasons for attempting to procure high-strength aluminum tubes.

The pre-war estimate of Iraq's nuclear program, as reflected in the October 2002 NIE *Iraq's Continuing Programs for Weapons of Mass Destruction*, was that, in the view of most agencies, Baghdad was "reconstituting its nuclear weapons program" and "if left unchecked, [would] probably…have a nuclear weapon during this decade," although it would be unlikely before 2007 to 2009.[3] The NIE explained that, in the view of most agencies, "compelling evidence" of reconstitution was provided by Iraq's "aggressive pursuit of high-strength aluminum tubes."[4] The NIE also pointed to additional indicators, such as other dual-use procurement activity, supporting reconstitution. The assessment that Iraq was reconstituting its nuclear program and could therefore have a weapon by the end of the decade was made with "moderate confidence."[5]

Based on its post-war investigations, the Iraq Survey Group (ISG) concluded—contrary to the Intelligence Community's pre-war assessments—that Iraq had not tried to reconstitute a capability to produce nuclear weapons after 1991.[6] Moreover, the ISG judged that Iraq's work on uranium enrichment, including development of gas centrifuges, essentially ended in 1991, and that its ability to reconstitute its enrichment program progressively decayed after that time.[7] With respect to the aluminum tubes, the ISG concluded that Iraq's effort to procure the tubes is "best explained by its efforts to produce 81-mm rockets," and the ISG uncovered no evidence that the tubes were intended for use in a gas centrifuge.[8]

The Community was, in brief, decidedly wrong on what many would view as the single most important judgment it made. The reasons why the Community was so wrong are not particularly glamorous—failures of analysts to question assumptions and apply their tradecraft correctly, errors in technical and factual analysis, a paucity of collection, and failure by the Community to authen-

ticate relevant documents. But these seemingly workaday shortcomings collectively led to a major mis-estimation of a critical intelligence question.

This chapter details our review of the Intelligence Community's performance on the nuclear issue. Like the chapters that follow on the Community's assessments of other aspects of Iraq's weapons programs, this chapter is divided into three sections. First, we review the Intelligence Community's pre-war assessments of Iraq's nuclear program. We then summarize the findings of the ISG regarding Iraq's nuclear efforts and how those findings compare to the Intelligence Community's assessments. The final section contains our findings concerning the causes of the Intelligence Community's failures on the aluminum tubes issue and the now-infamous Niger story.

## The Intelligence Community's Pre-War Assessments

The Intelligence Community's assessments of Iraq's pre-war nuclear program were not made in a vacuum. Rather, as the Intelligence Community later explained, its assessments were informed by its analysis of Iraq's nuclear ambitions and capabilities spanning the preceding fifteen years, as well as by "lessons learned from over a decade of dealing with Iraqi intransigence on this issue."[9] Thus the proper starting point for an evaluation of the Intelligence Community's assessments lies at the conclusion of the first Gulf War—when the Intelligence Community reviewed the state of Saddam Hussein's nuclear programs and was surprised by what it found.

***Post-Gulf War.*** Following the Gulf War, based on a variety of sources of intelligence including reporting from defectors, the Intelligence Community learned that Iraq's nuclear weapons program went "far beyond what had been assessed by any intelligence organization" in 1990-1991.[10] Before the Gulf War, in November 1990, the Community had assessed that, because analysts had not detected a formal, coordinated nuclear weapons program, Iraq likely would not have a nuclear weapon until the late 1990s.[11] Thus after the war the Intelligence Community was surprised to discover the breadth of Iraq's nuclear weapons program, including the wide range of technologies Iraq had been pursuing for uranium enrichment, which in turn indicated that Iraq "had been much closer to a weapon than virtually anyone expected."[12] This humbling discovery that Iraq had successfully concealed a sophisticated nuclear program from the U.S. Intelligence Community exer-

cised a major influence on the Intelligence Community's assessments throughout the early 1990s and afterwards.

Iraq's subsequent and continuing attempts to evade and deceive international inspectors heightened analysts' concerns.[13] In a 1994 Joint Atomic Energy Intelligence Committee (JAEIC) assessment, *Iraq's Nuclear Weapons Program: Elements of Reconstitution*, the Intelligence Community agreed that the "Iraqi government is determined to covertly reconstitute its nuclear weapons program," and that, although Iraq had not yet begun reconstitution, it "would most likely choose the gas centrifuge route" and would "invest a great deal of time and effort" to "conceal its efforts from long-term monitoring."[14]

***Mid-1990s.*** Still, through the mid-1990s, analysts continued to assess that Iraq had not yet reconstituted its nuclear program. Most agencies judged in a 1993 NIE that "if sanctions are lifted and especially if inspections cease, Baghdad will rapidly accelerate its effort" to produce nuclear weapons.[15] And all agencies agreed in a September 1994 JAEIC assessment that Iraq "still seems to be pursuing" its former program.[16] The Intelligence Community believed that if Iraq were able to mount a dedicated centrifuge program, it would probably take the Iraqis five to seven years to produce enough fissile material for a nuclear weapon.[17] This consensus was best reflected by an October 1997 assessment by the JAEIC, which reaffirmed its previous judgments that Iraq would need five to seven years to produce fissile material indigenously, assuming some availability of foreign technical assistance and supplies.[18] Whether that five to seven year clock had started to run, however, was unclear: this assessment noted that although there was "no firm evidence that reconstitution had begun, six years had passed since the Gulf War and the Community could not be certain whether the starting point for the five to seven year timeline was in the past or future."[19]

During this period, the lack of specific intelligence on the subject continued to complicate analysts' abilities to assess Iraq's ability to reconstitute its nuclear program. The Intelligence Community noted in a 1998 assessment, for instance, that there was limited and often contradictory human intelligence reporting on Iraqi nuclear efforts, with some human intelligence sources indicating that Iraq was continuing "low-level theoretical research for a weapons program" while other sources reported that "all nuclear-related activity [had been] halted."[20] The Intelligence Community acknowledged that it had an "incomplete picture of the Iraqi nuclear program."[21]

***Post-1998.*** The end of international inspections in 1998, prompted by Saddam Hussein's preventing the inspectors from doing their work, increased concern among analysts that Iraq would use that opportunity to reconstitute its nuclear program. Accordingly, in 1999, the JAEIC noted that although it still had no specific evidence that reconstitution had begun, the absence of inspectors gave Iraq greater *opportunity* to conduct covert research and development.[22] As of December 2000, however, an Intelligence Community Assessment noted that Iraq still did not appear to have taken major steps toward reconstitution.[23] Thus, after the departure of inspectors, the Intelligence Community assumed that Iraq had the opportunity and the desire to jumpstart its covert nuclear weapons program; by the end of 2000, however, the Community had seen no firm evidence that this was actually happening.

This judgment began to shift in early 2001 as a result of a discovery that, in hindsight, was the critical moment in the development of the Intelligence Community's assessment of Iraq's nuclear program. In March 2001, intelligence reporting indicated that Iraq was seeking high-strength tubes made of 7075 T6 aluminum alloy.[24] The Intelligence Community obtained samples of the tubes when a shipment bound for Iraq was seized overseas.[25]

At this point, a debate began within the Intelligence Community about the reason why Iraq had procured the tubes. The CIA assessed that the tubes were most likely for gas centrifuges for enriching uranium and believed that the tubes provided compelling evidence that Iraq had renewed its gas centrifuge uranium enrichment program.[26] CIA subsequently identified possible non-nuclear applications for the tubes,[27] but continued to judge that the tubes were destined for use in Iraqi gas centrifuges[28]—even while acknowledging that the Intelligence Community had very little information on Iraq's WMD programs to corroborate this assessment.[29]

This judgment concerning the tubes' likely intended use was echoed by another expert technical entity within the Intelligence Community. Analysts from the National Ground Intelligence Center (NGIC), a component of the U.S. Army recognized as the national experts on conventional military systems, judged that while it could "not totally rule out the possibility" that the tubes could be used for rockets and thus were not destined for a nuclear-related use, the tubes were, technically speaking, poor choices for rocket bodies. NGIC's expert judgment was therefore that there was a very low probability the tubes were designed for conventional use in rockets.[30]

Because of NGIC's expertise on conventional weapons systems such as rockets, NGIC's view that the tubes were poor choices for rocket bodies gave CIA analysts greater confidence in their own judgment that the tubes were likely for use in centrifuges.[31]

Other entities took a different view, however. The Department of Energy (DOE), the U.S. government's primary repository of expertise on nuclear matters, assessed that the tubes—although they "could be used to manufacture centrifuge rotors"—were "not well-suited for a centrifuge application" and were more likely intended for use in Iraq's Nasser 81 millimeter Multiple Rocket Launcher (MRL) program.[32] The International Atomic Energy Agency (IAEA) agreed with DOE's assessment, concluding that the tubes were usable in a gas centrifuge application but that they were not directly suited to that use.[33]

Despite this disagreement, the CIA informed senior policymakers that it believed the tubes were destined for use in Iraqi gas centrifuges.[34] While noting that there was disagreement within the Intelligence Community concerning the most likely use for the tubes, the CIA pointed out that there was also interagency consensus that the tubes *could* be used for centrifuge enrichment.[35] This consensus on capability led many analysts at both CIA and DIA to think that the tubes supplied the evidence that Iraq was starting to "reconstitute" its nuclear program.[36]

Other streams of evidence also raised flags. At about the same time, analysts began to see indications that Iraq was seeking procurement of other dual-use items that would be consistent with a possible renewed effort at developing centrifuges.[37] This activity concerned even DOE, which had expressed skepticism that the intercepted tubes had centrifuge applications.[38] These concerns were affected by the Intelligence Community's history of underestimating Iraq's nuclear program; as the National Intelligence Council (NIC) would later observe, analysts became concerned during 2002 that "they may again be facing a surprise similar to the one in 1991."[39]

In the months before the October 2002 NIE, the CIA continued to assess that the tubes were intended for use in gas centrifuges, albeit with slight variations in the strength of that formulation, pointing out that Iraq's interest in the tubes was "key" to the assessment that Iraq was "reconstituting its centrifuge program."[40] CIA presented this view in an Intelligence Assessment, entitled

*Iraq's Hunt for Aluminum Tubes: Evidence of a Renewed Uranium Enrichment Program*, in which CIA concluded that the aluminum tubes "are most likely for gas centrifuges for enriching uranium" and that Iraq's pursuit of such tubes provided "compelling evidence that Iraq has renewed its gas centrifuge uranium enrichment program."[41] The assessment noted that "some" in the Intelligence Community believed conventional armament applications, such as multiple rocket launchers, were "more likely end-uses," but the assessment noted that NGIC, the "national experts on conventional military systems," had found such uses "highly unlikely."[42] At the same time, DOE disseminated a separate assessment arguing that, while the tubes could be modified for use as centrifuge rotors, "other conventional military uses [we]re more plausible."[43] The Department of State's Bureau of Intelligence and Research (INR) agreed with DOE's assessment.[44]

***October 2002 NIE.*** The Intelligence Community judged in the NIE with moderate confidence that "Baghdad ha[d] reconstituted its nuclear weapons program."[45] Only INR dissented from this assessment, although INR judged in the President's Summary of the NIE that the overall evidence "indicates, at most, a limited Iraqi nuclear reconstitution effort."[46] By reconstitution, the Intelligence Community meant that Iraq was in the "process of restoring [its] uranium enrichment capability."[47] To the relevant CIA and DIA analysts, the pursuit of aluminum tubes provided "compelling evidence" of reconstitution.[48] In particular, the composition, dimensions, cost, and tight manufacturing tolerances for the tubes were assessed by CIA and DIA to exceed by far those needed for non-nuclear purposes, thus demonstrating that the tubes were intended for a nuclear-related use.[49] At the interagency coordination meeting for the NIE, both NSA and the National Geospatial-Intelligence Agency (NGA) agreed with the CIA/DIA position on the tubes.[50] DOE and INR dissented from the tubes judgment, assessing that the tubes were more likely for use in tactical rockets.[51]

The NIE stated that the conclusion that the tubes indicated reconstitution was bolstered by additional evidence that suggested Iraq could be rebuilding its nuclear program:

1. ***Other Dual-Use Procurements.*** Reporting indicated that Iraq was attempting to procure other dual-use items that would be required to build a gas centrifuge plant, such as magnets, "high-speed balancing machines," and machine tools.[52] These items are all dual-use materials,

however, and the reporting provided no direct indication that the materials were intended for use in a nuclear program, as indicated in the NIE.[53]

2. ***Nuclear Cadre.*** The NIE also pointed to evidence that Iraq was making efforts to preserve, and in some cases re-establish and enhance, its cadre of weapons personnel.[54] Reporting indicated that some scientists had been reassigned to the Iraqi Atomic Energy Commission (IAEC) and that Iraq had "reassembled" many scientists, engineers, and managers from Iraq's previous nuclear program.[55]

3. ***Activity at Suspect Sites.*** Sources indicated that Iraq was trying to procure a magnet production line in 1999-2001 and one report indicated the plant would be located at Al-Tahadi, where analysis suggested construction of buildings in late 2000 that could have housed a magnet production line.[56] Both sources indicated, however, that magnet procurements were likely affiliated with Iraq's missile program, rather than with nuclear applications, though some reporting noted that the cadre of scientists and technicians at the site formerly worked in the nuclear program.[57]

***Uranium from Niger.*** Although the NIE did not include uranium acquisition in the list of elements bolstering its conclusion about reconstitution, it did note that Iraq was "vigorously trying to procure uranium ore and yellowcake" from Africa.[58] This statement was based largely on reporting from a foreign government intelligence service that Niger planned to send up to 500 tons of yellowcake uranium to Iraq.[59] The status of the arrangement was unclear, however, at the time of the coordination of the Estimate and the NIE therefore noted that the Intelligence Community could not confirm whether Iraq succeeded in acquiring the uranium.[60] Iraq's alleged pursuit of uranium from Africa was thus not included among the NIE's Key Judgments.[61] For reasons discussed at length below, several months after the NIE, the reporting that Iraq was seeking uranium from Niger was judged to be based on forged documents and was recalled.[62]

In short, all of the coordinating agencies, with the exception of INR, agreed that Iraq was reconstituting its nuclear program.[63] Of those agencies that agreed on reconstitution, all but DOE agreed that the tubes provided "compelling evidence" for that conclusion. DOE reaffirmed its previous assessments

that, while the tubes could be modified for use in a gas centrifuge, they were poorly suited for such a function and were most likely designed for use in conventional rockets.[64] On the question of reconstitution, DOE believed that the other factors—the attempted procurement of magnets and balancing machines, efforts to reconstitute the nuclear cadre, activity at suspect sites, and evidence of Iraqi efforts to obtain uranium from Africa—justified the conclusion that Iraq was reconstituting its nuclear program.[65] None of the other agencies placed significant weight on reporting about attempts to procure uranium from Africa to support their conclusion of reconstitution.[66]

***Post-NIE.*** The publication of the NIE did not settle the dispute about the aluminum tubes and so, in the period between the NIE and the invasion of Iraq, debate within the Intelligence Community over their significance continued. INR, for its part, continued to see "no compelling reason to judge that Iraq ha[d] entered" the timeframe of at least five to seven years that the Intelligence Community agreed Baghdad would need to produce sufficient fissile material for a nuclear weapon.[67] DOE, meanwhile, continued to believe that reconstitution was underway but that the "tubes probably were not part of the program," [68] assessing instead that the tubes were intended for use in conventional rockets.[69] On the other side of the dispute, NGIC and CIA continued to assess that the tubes were destined for use in gas centrifuges.[70] Outside the Intelligence Community, the IAEA, after inspections resumed in fall 2002, also weighed in on the dispute, concluding with DOE and INR that the tubes were likely intended for use in Iraq's 81 millimeter rocket program.[71]

During this time the CIA continued to explain to senior policymakers that the Intelligence Community was not of one view on the most likely use for the tubes,[72] but CIA offered its own view that the "alternative explanation" for the tubes' intended use—that they would be used for rockets—was likely an Iraqi "cover story."[73] The CIA also noted the overall paucity of information on Iraq's programs, but suggested that the lack of information was due in part to Iraq's successful efforts to hide its illicit activity.[74]

Other countries' intelligence agencies views of the tubes were, on balance, somewhat more circumspect than that of the majority in the NIE. For its part, the British Joint Intelligence Committee assessed, as did the NIE, that the aluminum tubes, with some modifications, would be suitable for use in a centrifuge, but noted that there was no definitive intelligence that the tubes were destined for the nuclear program.[75] The views of the Australian Office of

National Assessments on the relevance of the tubes to Iraq's nuclear program were "inconsistent and changeable."[76]

## Post-War Findings of the Iraq Survey Group

The Iraq Survey Group concluded that Iraq had not tried to reconstitute a capability to produce nuclear weapons after 1991.[77] It concluded that Iraq's efforts to develop gas centrifuges for uranium enrichment ended in 1991, as did Iraq's work on other uranium enrichment programs, which Iraq had explored prior to the Gulf War.[78] The ISG also found no evidence that Iraq had taken steps to advance its pre-1991 work in nuclear weapons design and development.[79] Although the ISG did find indications that Saddam remained interested in reconstitution of the nuclear program after sanctions were lifted, it concluded that Iraq's ability to reconstitute its program progressively decayed after 1991.[80]

Not long after the start of the Iran-Iraq war in 1980, Iraq started to pursue formally a uranium enrichment program using a variety of uranium enrichment techniques.[81] By 1990, Iraq had built two magnetic-bearing centrifuges (with foreign assistance) using imported carbon fiber rotors and two oil-bearing centrifuges.[82] During the first Gulf War, however, nearly all of the key nuclear facilities in Iraq—those involved in the processing of nuclear material or weapons research—were bombed and many of the facilities were largely destroyed.[83]

After the Gulf War, Iraq initially chose not to disclose the extent of its nuclear program and instead sought to hide any evidence of it. Accordingly, the director of Iraq's Military Industrialization Commission, Hussein Kamil, ordered the collection of all inculpatory documents and equipment. The equipment and documentation were then moved to a variety of locations to hide them from the IAEA. Hussein Kamil ordered at least one set of all nuclear-related documents and some equipment to be retained by a senior scientist.[84]

Despite Iraqi efforts, in early summer 1991 the IAEA confronted Baghdad with evidence of uranium enrichment components during the course of its inspections. At that point Baghdad admitted to its large pre-war enrichment programs, but still did not fully declare the extent of its centrifuge program.[85]

Indeed, Iraq continued to resist more comprehensive disclosure of its pre-1991 nuclear program until after the defection of Hussein Kamil in 1995, when a large number of documents and equipment fell into the hands of UNSCOM and the IAEA. From this point forward, according to the ISG, the Iraqis appear to have been more cooperative and provided more complete information. For example, the Iraqis largely declared their pre-1991 centrifuge program, although a full set of documents obtained by Iraq from German engineers in the 1980s was not supplied to IAEA inspectors.[86]

Although the Iraqis did not make more comprehensive disclosures about their nuclear program until 1995, the Iraq Survey Group concluded that Iraq had actually ended its nuclear program in 1991. More specifically, the ISG assessed that Iraq's development of gas centrifuges essentially ended in 1991 and that Iraq did not continue work on any of the other pre-1991 enrichment methods it had explored, including electromagnetic isotope separation (EMIS).[87] The ISG did point out, however, that many of the former EMIS engineers and scientists continued to work for either the Iraqi Atomic Energy Commission or the Military Industrialization Commission in roles that could preserve their technical skills.[88]

Despite these efforts to preserve the skills and talent of the nuclear cadre, the intellectual capital underlying Iraq's nuclear program decayed in the years after 1991.[89] For example, starting around 1992, the Director of Iraq's Military Industrialization Commission transferred personnel from the former nuclear program to various military research and production facilities. Some of the work performed by these former nuclear scientists by its nature preserved for Iraq capabilities that would be needed for a reconstituted nuclear program. Still, the ISG noted that the overall decline of the Iraqi economy made it very difficult to retain scientists, many of whom departed for better prospects abroad.[90]

With the influx of funds from the Oil-for-Food program and later the suspension of cooperation with UNSCOM, Saddam began to pay renewed attention to former members of the Iraq nuclear program. In the late 1990s, for instance, he raised salaries for those in the Military Industrialization and Iraqi Atomic Energy Commissions, and new programs, such as joint programs with universities, were initiated to employ the talent of former nuclear program employees.[91] In the year before Operation Iraqi Freedom, Iraq's Military Industrialization Commission also took steps to improve capabilities that

could have been applied to a renewed centrifuge program for uranium enrichment. But the ISG did not uncover information indicating that the technologies being pursued were intended to support such a program.[92]

With respect to Iraq's interest in procuring high-strength aluminum tubes, the ISG concluded that the Iraqi attempt to procure the tubes is best explained by Iraq's efforts to produce effective 81 millimeter rockets; the ISG uncovered no evidence that the tubes were intended for use in a gas centrifuge.[93] The ISG arrived at this conclusion only after investigating the key indicators that suggested a possible centrifuge end-use for the tubes—for example, the tubes' dimensions and tight manufacturing tolerances—and found no evidence of a program to design or develop an 81 millimeter aluminum rotor centrifuge.[94]

What the ISG found instead was that, with respect to the dimensions of the tubes, Iraqi nuclear scientists thought it was at best impractical for Iraq to have made a centrifuge with 81 millimeter rotors. For example, Ja'far Diya Ja'far, the head of Iraq's pre-1991 uranium enrichment program, stated in post-war debriefings that, while it was possible to make a rotor from the tubes, he thought it would be impractical to do so.[95] He also said that using 81 millimeter rockets as a "cover story" for a centrifuge project would not have been very useful, because Iraq had difficulty importing *any* goods.[96] Ja'far similarly did not consider it reasonable that Iraq could have pursued a centrifuge program based on 81 millimeter aluminum tubes, judging the technical challenges to doing so were too great.[97]

Conversely, the Iraq Survey Group investigation did uncover what it judged to be plausible accounts that linked the tubes to 81 millimeter rockets, and which answered questions about why the Iraqis had sought such tight manufacturing specifications for the tubes. For example, some sources indicated to the ISG that the tight tolerance requests were driven by a desire to improve the accuracy of the rockets. Inconsistencies among rockets had resulted in past variations in range and accuracy, according to these sources, and the Iraqis chose to address this problem by tightening specifications.[98] Another explanation was that the engineering drawings for the Iraqi 81 millimeter rocket, which was originally reverse-engineered from an Italian air-to-ground rocket (the Medusa), had undergone many ad hoc revisions over the years because the Iraqis were using their 81 millimeter rockets as ground-to-ground rockets. An Iraqi military committee was convened to return the design to the original Italian-based design, according to the ISG report, and that military committee

then set new, and more strict, specifications.[99] The ISG also learned that misfires sometimes resulted from pitting in the tubes caused by improper storage and corrosion, a problem that could explain the requirement that the tubes be anodized and shipped carefully.[100]

Though ultimately concluding that the evidence did not show that the Iraqis intended a nuclear end-use for the tubes, the Iraq Survey Group did note some inconsistencies in the explanation that the tubes were intended for use in tactical rockets.[101] For example, the ISG found technical drawings that showed that Iraq's 81 millimeter rocket program had a history of using tubes that fell short of the strict manufacturing standards demanded in the procurement attempts before the war.[102] Also, the ISG found evidence that, in the months just before the war, the Iraqis accepted lower-quality, indigenously produced aluminum tubes for its 81 millimeter rockets, despite the continuing efforts to procure high-specification tubes from abroad.[103] Iraq also explored the possibility (about a year before the war) of using steel for the rocket bodies. This approach was rejected, however, because it would have required significant design modifications for the existing 81 millimeter rocket design.[104] The ISG noted that these efforts raise questions about whether high-specification tubes were really needed for rockets.[105]

The ISG reconciled this evidence by judging that Iraq's continued efforts to obtain tubes from abroad, even while simultaneously accepting some indigenously produced tubes for use in rockets, could be explained in large measure by bureaucratic inefficiencies and fear of senior officials in the ranks of the Iraqi government.[106] For example, Dr. Huwaysh, the head of the Military Industrialization Commission, "exhibited a rigid managerial style" and frequently made unreasonable production demands. The fear of being held responsible for rejected tubes or components affected the lead production engineer and he therefore decided to tighten specifications for the rocket program. Similarly, a report from the rocket program noted that some engineers requested tight specifications in order to appear effective in addressing problems. Also, because Huwaysh demanded results quickly, the engineers did not have time to attempt a detailed analysis of the causes for rocket scatter and inaccuracy; instead, the engineers simply tightened some specifications in the hope that that would improve accuracy.[107] Other factors influencing the continuing efforts to procure tubes from abroad included the "lack of sufficient indigenous manufacturing capabilities"—an

effort that Iraq only began in 2002—the high costs of production, and the "pressure of the impending war."[108]

The ISG noted that one other factor that the Intelligence Community had cited as evidence that the tubes were intended for use in a centrifuge was that the potential supplier was asked to provide 84 millimeter tubes—a change that would have meant the tubes could *not* be used in an 81 millimeter rocket.[109] But the ISG found no clear indication that it was Iraq (or an Iraqi entity) that was making these inquiries about 84 millimeter tubes.[110] In any event, the ISG concluded that, although a larger diameter tube would be better for use in a centrifuge, Iraq already had 500 tons of 120 millimeter diameter aluminum shafts which it had imported before sanctions were imposed in 1990. And, furthermore, Iraq was using those shafts in the months before Operation Iraqi Freedom to support the flow-forming operations related to the 81 millimeter rocket program.[111]

With respect to alleged "high-level interest" in tubes by Iraqi leaders, the ISG concluded that such interest in the tubes appears to have focused on efforts to produce 81 millimeter rockets rather than on any element of a nuclear program.[112]

The Iraq Survey Group also found no evidence that Iraq sought uranium from abroad after 1991.[113] With respect to the reports that Iraq sought uranium from Niger, ISG interviews with Ja'far Diya Ja'far, the head of Iraq's pre-1991 enrichment programs, indicated that Iraq had only two contacts with the Nigerien government after 1998—neither of which was related to uranium.[114] One such contact was a visit to Niger by the Iraqi Ambassador to the Vatican Wissam Zahawie, the purpose of which Ja'far said was to invite the Nigerien President to visit Iraq (a story told publicly by Zahawie).[115] The second contact was a visit to Iraq by a Nigerien minister to discuss Nigerien purchases of oil from Iraq—with no mention of "any kind of payment, *quid pro quo*, or offer to provide Iraq with uranium ore, other than cash in exchange for petroleum."[116] The use of the last method of payment is supported by a crude oil contract, dated June 26, 2001, recovered by the ISG.[117]

The ISG found only one offer of uranium to Baghdad since 1991—an offer that Iraq appears to have turned down.[118] The ISG found a document in the headquarters of the Iraqi Intelligence Service that reveals that a Ugandan businessman had approached the Iraqi Embassy in Nairobi with an offer to

sell uranium, reportedly from the Congo. The Iraqi Embassy in Nairobi, reporting back to Baghdad on the matter on May 20, 2001, indicated that the Embassy told the Ugandan that Iraq did not deal with "these materials" because of the sanctions.[119]

Finally, and on a broader plane, even if an order to reconstitute had been given, Iraq Survey Group interviews with former senior officials indicated that Iraq would not have been able to do so given the conditions inside the country in 2002.[120] Unsurprisingly, therefore, the ISG found no indication that Iraq had resumed fissile material or nuclear weapon research and development activities after 1991.[121]

## Analysis of the Intelligence Community's Pre-War Assessments

This marked disjuncture between the Intelligence Community's assessments and the findings of the Iraq Survey Group about Iraq's purported nuclear weapons program was not solely the product of bad luck or the inherent difficulties of making intelligence judgments. It arose out of fundamental flaws in the way the Intelligence Community approached its business.

Above all, the Intelligence Community's failure on the nuclear issue was a failure of analysis. To be sure, the paucity of intelligence contributed to that failure. Although signals intelligence played a key role in some respects that we cannot discuss in an unclassified format, on the whole it was not useful. Similarly, though imagery intelligence showed some construction at a possible suspect nuclear site in or around 2000, imagery provided little helpful insight into the purpose of that activity and nothing beyond that. And, other than information on the alleged uranium deal that was later determined to be unreliable, very little human intelligence was available to provide insight into Iraq's intentions. The time pressures of the October 2002 NIE also may have hampered the normal thorough review before dissemination.[122]

But on the crucial question of whether the aluminum tubes were for use in a gas centrifuge or in tactical rockets—an analytical question—the Intelligence Community got it wrong.[123] And, notably, it was not one of the difficult and inherently speculative questions intelligence analysts often confront; it was not a question that required the Intelligence Community to make a prediction about future events or to draw conclusions about the state of the world based upon limited information. Rather, the critical question

was, at bottom, largely a technical one, where the critical facts were known or knowable: namely, how well-suited were the aluminum tubes for tactical rockets and centrifuges, respectively? An even-handed assessment of the evidence should have led the Intelligence Community to conclude that the tubes were more likely destined for tactical rockets. This section examines this analytic failure and other issues uncovered by our review of the Intelligence Community's performance.

### Nuclear Weapons Finding 1

The Intelligence Community's judgment about Iraq's nuclear program hinged chiefly on an assessment about Iraq's intended use for high-strength aluminum tubes it was seeking to procure. Most of the agencies in the Intelligence Community erroneously concluded these tubes were intended for use in centrifuges in a nuclear program rather than in conventional rockets. This error was, at the bottom, the result of poor analytical tradecraft—namely, the failure to do proper technical analysis informed by thorough knowledge of the relevant weapons technology and practices.

The judgment of most agencies that Baghdad's pursuit of aluminum tubes "provide[d] compelling evidence" that Iraq was reconstituting its weapons turned upon two separate but related analytical determinations.[124] The first was that the tubes would not have been well-suited for use in Iraq's conventional military arsenal—in particular, as a conventional rocket casing. The second was that the tubes *were* a suitable fit for centrifuges in a nuclear program.

This section addresses the soundness of each of these conclusions in turn. We find that the Intelligence Community—and in particular, conventional weapons analysts at the National Ground Intelligence Center (NGIC) in the Defense Department—got the first of these two questions completely wrong; the intercepted tubes were not only well-suited, but were in fact a precise fit, for Iraq's conventional rockets, and the Intelligence Community should have recognized as much at the time. The second question—whether the tubes would have been well-suited for centrifuge applications—was a closer one, but we conclude that certain agencies were more wedded to the analytical position that the tubes were destined for a nuclear program than was justified by the technical evidence. We also conclude that these misjudgments, while reflecting lapses in basic tradecraft, ultimately stemmed from a deeper source:

analysts' willingness to accept that a superficially enticing piece of evidence confirmed the prevailing assumption—that Iraq was attempting to reconstitute its nuclear program—was wrong. That CIA and DIA reached this conclusion was a product of, in our view, an effort to fit the evidence to the prevailing assumptions.

***Suitability of the tubes for conventional rockets.*** The most egregious failure regarding the aluminum tubes was the inability of certain agencies to assess correctly their suitability for a conventional weapons system. While the CIA and DIA acknowledged that the tubes *could* be used for rockets, these agencies believed it was highly unlikely that the tubes had been intended for such a use.[125] But these agencies' basis for believing this was wrong. Iraq had been seeking tubes composed of a particular material—high-strength 7075-T6 aluminum—which CIA and DIA viewed as suggestive of a nuclear end-use.[126] But that material is wholly consistent with a non-nuclear end-use. This same material in fact has been used in rockets manufactured by Russia, Switzerland, and twelve other countries, according to Department of Defense rocket design engineers.[127] Indeed, *Iraq itself* had used this kind of aluminum in its Nasser 81 rocket program and had declared that use in its 1996 declaration to the IAEA.[128]

Yet NGIC, the national experts on conventional military systems, assessed in September 2002 that the material and tolerances of the tubes sought by Iraq were "highly unlikely" to be intended for rocket motor cases.[129] That assessment was clearly mistaken and should have been recognized as such at the time. NGIC later conceded, in written testimony to the Senate Select Committee on Intelligence, that "lightweight rockets, such as those originally developed for air-to-ground systems, typically use 7075-T6 aluminum for the motor casing."[130] As the experts on such systems, NGIC should have been aware of these facts. Similarly, although NGIC assessed that the tolerances of the tubes Iraq was seeking were "excessive" for rockets, NGIC was not aware at that time of the tolerances required for the Iraqi Nasser 81 rockets, for the Italian Medusa rocket on which the Nasser 81 was based, or for comparable U.S. rockets.[131]

NGIC also believed that the tubes would make poor choices for rocket motor bodies because the walls of the tubes were too thick.[132] But the tubes Iraq was seeking had precisely the same dimensions—including the same wall thickness—as the tubes that Iraq itself used in its Nasser 81 rockets in 1996.[133]

This fact also should not have come as a revelation to NGIC analysts, as DOE had published detailed assessments of the tubes used in the Nasser 81 rocket—including their dimensions—in August 2001, and as the IAEA had noted Iraq's use of the Nasser 81 rocket in its earlier catalogs of Iraq's weapons programs.[134] Yet the two primary NGIC rocket analysts said that they did not know the dimensions of the Nasser 81 rockets at that time. While these analysts assert that they had no access to IAEA information and did not receive the DOE reporting in question,[135] we believe that NGIC could and should have conducted a more exhaustive examination of the question. We agree with the conclusion of the Senate Select Committee on Intelligence that NGIC's performance represents a "serious lapse" in analytical tradecraft.[136]

CIA and DIA's confidence in their conclusions also led them to fail to pursue additional, easily obtainable data on the tubes that would have pointed them in the direction of conventional weapons applications. For example, though elements of the Intelligence Community were aware that the Nasser 81 millimeter rocket was likely reverse-engineered from the Italian Medusa air-to-ground rocket, neither DIA nor CIA—the two most vociferous proponents of a nuclear end-use—obtained the specifications for the Medusa rocket until well after the commencement of Operation Iraqi Freedom.[137] Indeed, CIA appears to have consciously bypassed attempts to gather this crucial data. A CIA officer had actually suggested that CIA track down the precise dimensions and specifications of the Medusa rocket in order to evaluate the possibility that the tubes Iraq was seeking were in fact intended for rockets. CIA rejected the request in early September 2002, however, on the basis that such information was not needed because CIA judged the tubes to be destined for use in centrifuges—a textbook example of an agency prematurely closing off an avenue of investigation because of its confidence in its conclusions.[138]

***Suitability of tubes for nuclear centrifuges.*** As discussed above, a debate raged within the Intelligence Community in the months preceding the Iraq war on a second question as well: namely, whether the intercepted aluminum tubes were well-suited for use in nuclear centrifuges. According to both DOE and CIA centrifuge experts, the resolution of this issue depended primarily on the answer to two highly technical questions: first, whether the tubes had a sufficiently large internal diameter (and hence could allow the requisite gas flow) to enrich uranium effectively, and whether the walls of the tubes were too thick for use as centrifuge rotors.[139] While generally the analytical issue of the tubes' suitability for centrifuges was more technically complex than

that of their fit for conventional rocket applications, the manner in which certain agencies answered these two technical questions about centrifuge-suitability suggests that their analysis was driven more by their underlying assumptions than by the available scientific evidence.

For example, to answer the first question, analysts from CIA's Weapons Intelligence, Non-Proliferation, and Arms Control Center (WINPAC) sought the assistance of the DOE National Laboratories—specifically, Oak Ridge National Laboratory—to test the tubes.[140] The Oak Ridge laboratory concluded that, while it was technically possible to enrich uranium using tubes of the diameter the Iraqis were seeking, it would be suboptimal to do so.[141] The prototype design unit that Iraq built before the Gulf War—which used carbon fiber rotors and was built with the assistance of German engineers using the European Urenco design—had a separative capability four to five times greater than would a centrifuge built using the 81 millimeter tubes for rotors.[142] Accordingly, to support a program that could produce one nuclear device per year, Iraq would need to manufacture and deploy 10,000 to 14,000 such machines.[143] The number of tubes Iraq was seeking, however, would be enough to manufacture 100,000 to 150,000 of these machines, which could produce 170-260 kg of highly enriched uranium per year (enough for 8-10 nuclear devices per year). But DOE pointed out that no proliferator has ever operated such a large number of centrifuges.[144] In other words, the tubes Iraq was seeking were so suboptimal for uranium enrichment that it would have taken many thousands of them to produce enough uranium for a weapon—and although Iraq was in fact seeking thousands of tubes, DOE assessed it would have been highly unlikely for a proliferator to choose a route that would require such a large number of machines.

With respect to the second suitability question—whether the walls of the tubes were too thick for centrifuge use—CIA's WINPAC sought the assistance of a contractor to perform separate tests (a "spin test") of the tubes in order to determine if they were strong enough to withstand the extremely high speeds at which centrifuge rotors must spin.[145] The initial test performed by the contractor was reported to have resulted in successfully spinning a tube at 60,000 revolutions per minute (rpm).[146] The NIE included these test results and explained that this test provided only a rough indication that the tubes were suitable as centrifuge rotors. The NIE noted, however, that additional tests would be performed at higher speeds to determine whether the tubes

were suitable for operations under conditions that replicated gas centrifuge operations.[147]

Unfortunately, these subsequent tests—performed by CIA contractors in January 2003—only clouded an already murky picture. The contractors' initial findings gave the appearance that the tubes were of insufficient strength for use in centrifuge equipment. The CIA, however, questioned the methodology used by its contractors, asserting that the test results had failed to distinguish between the failures of the *tubes* and failures of the *test equipment* itself.[148] The contractors then provided a "correction" with new test data, which, the CIA believed, demonstrated that the tubes had sufficient strength to be spun at speeds of 90,000 rpm.[149] But DOE was unpersuaded by the corrected findings and argued that the CIA's conclusions were not supported by the test results.[150] At bottom, the ineptly handled spin tests did little more than deepen the divisions between CIA and DOE over the tubes' intended use; in the words of one former senior Intelligence Community official, the tests were "like throwing a lighted match into gasoline."[151]

In any event, the initial technical tests led all agencies to agree that the tubes *could* be used to build gas centrifuges for uranium enrichment.[152] DOE, however, did not believe that tubes were *intended* for such use, a view with which INR agreed. DOE's view was based on disagreement with CIA's view on both counts—DOE argued that the diameter of the tubes was too small and the walls were too thick for centrifuge use. The tubes, in DOE's judgment, were therefore "not favorable for direct use as centrifuge rotors."[153]

CIA countered that the dimensions of the tubes were "similar" to Iraq's prewar Beams gas centrifuge design and "nearly matched" the tube size used in another type of gas centrifuge, the Zippe design.[154] Nuclear analysts from WINPAC explained that prior to the Gulf War Iraq had pursued the development of a Beams centrifuge with aluminum rotors that had a wall thickness in excess of 3.0 millimeters, and that Iraq had built an oil centrifuge with aluminum rotors in excess of 6.0 millimeters. CIA also asserted that the unclassified document describing Zippe's design could be interpreted as using rotors with wall thicknesses that ranged from 1.0 millimeter to 2.8 millimeters.[155] WINPAC reasoned that, although these dated models for centrifuges were not ideal, Iraq was likely to build what it *could* rather than what would be the optimal design.[156] Specifically, old centrifuge designs using aluminum rotors were the only ones Iraq had successfully built in the past without extensive

assistance from foreign experts.[157] Similarly, DIA assessed that "[a]lternative uses" for the tubes were "possible," but that such alternatives were "less likely because the specifications [of the tubes] are consistent with late 1980s Iraqi gas centrifuge rotor designs."[158]

DOE disputed this analysis on several grounds. From the outset, DOE believed that Iraq would pursue a more advanced design, such as the Urenco-style centrifuge that Iraq had pursued with the covert assistance of German engineers before the Gulf War.[159] DOE also disagreed with CIA's technical conclusion that the tubes were a plausible match for the Zippe design; it asserted that the optimum Zippe design required a wall thickness no greater than a certain figure (the figure itself is classified).[160] Finally, DOE noted that the Beams design had never been successfully used to enrich uranium—Beams himself could never get his design to work beyond pilot-plant operation.[161] As DOE subsequently explained, in DOE's view it was therefore irrelevant, and misleading, to point to similarities with this design as evidence the tubes were intended for use in a centrifuge.[162]

In sum, although even DOE agreed that the tubes *could* be used for centrifuges, DOE's assessment that such use was unlikely proved closer to the mark. DIA and CIA analysts overestimated the likelihood that the tubes were intended for use in centrifuges, an erroneous judgment that resulted largely from the unwillingness of many analysts to question—or rigorously test—the underlying assumption that Iraq would try to reconstitute its nuclear program.

***The influence of assumptions on the analytical process.*** As we have seen, the majority of intelligence agencies—and in particular, CIA and DIA—were simply wrong on the question of whether the aluminum tubes were suitable for conventional rocket applications. A similar dynamic emerged during the intra-Community debate on whether the tubes were a good fit for centrifuge designs; while the judgments were in this case more defensible, CIA and DIA consistently construed quite ambiguous technical data as supporting the conclusion that the aluminum tubes were well-suited for use as centrifuges. A consistent pattern emerges: certain analysts, and certain agencies, were clearly inclined to view evidence—even exceedingly technical evidence—through the prism of their assumptions that Iraq was reconstituting its nuclear program.

This tendency is reflected in the way these analysts interpreted other information about the tubes as well. For instance, CIA and DIA assessed that the tight manufacturing tolerances that Iraq required for the tubes pointed towards centrifuge use, because of the increased cost and manufacturing challenges that would result from these stringent requirements.[163] But as DOE pointed out, although the specifications did seem excessive for use in conventional rockets, the tolerances were also a peculiar requirement if they were destined for centrifuges; the specifications were neither as tight as those previously used by Iraq for centrifuges nor as tight as those typically desired for high-speed rotating equipment.[164] Moreover, the tubes would have required substantial modifications to make them suitable for centrifuge use,[165] and the required modifications would have been inconsistent with the tight manufacturing tolerances demanded.[166] Finally, the tight specifications were not inconsistent with conventional rocket applications; as DOE pointed out to the Senate Select Committee on Intelligence, it is in fact quite common for inexperienced engineers to over-specify tolerances when trying to reverse-engineer equipment.[167]

The focus of certain intelligence agencies on the cost of the tubes offers another example of analysts straining to fit the data into their prevailing theories. The NIE cites reporting indicating that Iraq paid "up to" $17.50 for the tubes, and noted that the willingness to pay this "high" price was indicative of the high priority of the purchase—a fact which, it is suggested, supports the view that the tubes had nuclear application.[168] But in fact this price was not unusually elevated. DOE obtained a price quote from a U.S. manufacturer—without the tight tolerances—of $19.27 per tube.[169]

Adherence to prevailing assumptions also led analysts to discount contrary evidence. Both CIA and DIA were quick to dismiss evidence which tended to show that the tubes were intended for use in Iraq's rocket program, instead attributing such contrary evidence to Iraq's "deception" efforts. Analysts were well aware that Iraq historically had been very successful in "denial and deception"[170] activities, and that, at least in part because of such activities, the Intelligence Community had underestimated the scope of Iraq's pre-Gulf War nuclear program. So analysts, in order to ensure that they were not fooled again, systematically discounted the possibility that the tubes were for rockets.

Indeed, in some instances, analysts went even further, interpreting information that contradicted the prevailing analytical line as intentional deception, and therefore as *support* for the prevailing analytical view. For example, NGIC characterized the Iraqi claim that the tubes were for use in tactical rockets as "a poorly disguised cover story," reasoning that Iraq was claiming such an end-use for the tubes because Iraq was aware that its intentions to use the tubes in a nuclear centrifuge application "have been compromised."[171] CIA also noted in a Senior Executive Memorandum that Iraq "has established a cover story…to disguise the true nuclear end use" for the aluminum tubes, explaining that Iraq may be exploiting press reports regarding the disagreement within the Intelligence Community about the tubes.[172] In some quarters, then, the thesis that the tubes were destined for centrifuges took on the quality of a hypothesis that literally could not be disproved: both confirming and contradictory facts were construed as supporting evidence.[173]

The unwillingness to question prevailing assumptions that Iraq was attempting to reconstitute its nuclear program therefore resulted in faulty analysis of the aluminum tubes. While CIA analysts now agree with the ISG position that the tubes were most likely intended for use in rockets rather than in centrifuge applications,[174] as of March 2005, CIA had still not published a reassessment of its position on the tubes.[175]

### Nuclear Weapons Finding 2

In addition to citing the aluminum tubes, the NIE's judgment that Iraq was attempting to reconstitute its nuclear weapons program also referred to additional streams of intelligence. These other streams, however, were very thin, and the limited value of that supporting intelligence was inadequately conveyed in the October 2002 NIE and in other Intelligence Community products.

### Nuclear Weapons Finding 3

The other indications of reconstitution—aside from the aluminum tubes—did not themselves amount to a persuasive case for a reconstituted Iraqi nuclear program. In light of the tenuousness of this other information, DOE's argument that the aluminum tubes were not for centrifuges but that Iraq was, based on these other streams of information, reconstituting its nuclear program was a flawed analytical position.

Until now, this review has focused on flaws in the Intelligence Community's assessment concerning the likely uses of the aluminum tubes—the central basis for the overall judgment that Iraq was reconstituting. But the Intelligence Community also identified in the NIE other evidence to support this conclusion, including Iraq's attempts to procure other dual-use items needed for a gas centrifuge such as magnets and balancing machines, efforts to reconstitute its nuclear cadre, and activity at suspect sites. This evidence, however, was based on thin streams of reporting (and indeed, as will be shown, the NIE's recitation of this evidence was also marred by inaccuracies).[176] Analysts are of course often called upon to make judgments based on limited information, particularly on difficult targets such as Iraq's nuclear program. With that said, the NIE too often failed to communicate the paucity of intelligence supporting its assessments and also contained several inaccurate statements.

For example, the NIE indicated that according to sensitive reporting, Saddam Hussein was "personally interested in the procurement of aluminum tubes."[177] This sensitive reporting was a single report from a liaison service which reported that Saddam was "closely following" the purchase of the tubes.[178] Yet even this single report was under dispute. According to one CIA officer, it was the service's intelligence officer who said Saddam was following the purchase, although another CIA officer at the meeting remembered the exchange differently.[179] Even though fundamental doubts existed about the validity and ultimate source of this information, CIA was not able to clarify this point (which was understandable, given the uncertainties inherent in working with liaison services) and allowed the NIE to use the information without reflecting this uncertainty (which was not understandable).[180]

In other places, the NIE's assertions concerning Iraq's nuclear program were simply factually incorrect. First, the NIE pointed to Iraq's attempts to procure a permanent magnet production capability as evidence that Iraq was reconstituting its uranium enrichment program. It noted that "a large number of personnel for the new production facility worked in Iraq's pre-Gulf War centrifuge program."[181] This, however, was a mistake; the National Intelligence Officer (NIO) for Strategic and Nuclear Programs subsequently noted that the workers had not been associated with Iraq's centrifuge program but with the former EMIS program.[182] And the NIE misidentified a front company involved in procurement efforts and the items being procured; the company involved in the initial aluminum tube procurement was seeking high-

speed spin testing machines, while another company, also involved in tube procurement, was seeking balancing machines.[183]

In light of this, DOE's position on Iraqi nuclear reconstitution appears rather dubious. DOE was alone in its view that these other procurement attempts, combined with the later-recalled reporting regarding uranium from Africa, provided sufficient evidence to conclude that Iraq was reconstituting. Leaving aside the factual errors noted above, there was no evidence that Iraq had actually obtained the dual-use items it was seeking, and DOE conceded that there was no evidence that the magnets Iraq was seeking were intended for the nuclear program.[184] With respect to the alleged uranium enrichment procurement efforts in Africa, DOE reasoned that any indication that Iraq was attempting to procure uranium covertly would be a significant indication of Iraq's intention to pursue a nuclear program.[185]

The gossamer nature of the evidence relied upon by DOE, and the doubts expressed about the attempts to procure uranium from Africa long before the reporting was recalled (more in a moment about this) had led senior officials in other agencies to question the substantive coherence of DOE's position. The former NIO for Strategic and Nuclear Programs, for one, said that he had not fully understood the logic supporting DOE's conclusion that Iraq was reconstituting despite specifically questioning DOE on this point during the NIE coordination meeting.[186] Similarly, a former senior intelligence officer remarked in November 2004 that DOE's position had "made sense politically but not substantively."[187] In fact, the DOE intelligence analyst who participated in the coordination meetings for the NIE—while maintaining that there was no political pressure on DOE, direct or indirect, to agree with the reconstitution conclusion at the NIE coordination meeting—conceded to this Commission that "DOE didn't want to come out before the war and say [Iraq] wasn't reconstituting."[188]

As mentioned above, DOE's position rested in part on a piece of evidence not relied upon by any of the other intelligence agencies in the NIE—that of Iraq's attempts to procure uranium from Niger.[189] This evidence was unconfirmed at the time of the NIE and subsequently shelved because of severe doubts about its veracity. As will be shown in the next section, the Intelligence Community was right to have its doubts about this story, and DOE was wrong

to rely on it as an alternative piece of evidence confirming Iraq's interest in reconstitution.

### Nuclear Weapons Finding 4

The Intelligence Community failed to authenticate in a timely fashion transparently forged documents purporting to show that Iraq had attempted to procure uranium from Niger.

Intelligence Community agencies did not effectively authenticate the documents regarding an alleged agreement for the sale of uranium yellowcake from Niger to Iraq. The President referred to this alleged agreement in his State of the Union address on January 28, 2003—evidence for which the Intelligence Community later concluded was based on forged documents.[190]

To illustrate the failures involved in vetting this information, some details about its collection require elaboration. The October 2002 NIE included the statement that Iraq was "trying to procure uranium ore and yellowcake" and that "a foreign government service" had reported that "Niger planned to send several tons" of yellowcake to Iraq.[191] The statement about Niger was based primarily on three reports provided by a liaison intelligence service to CIA in late 2001 and early 2002.[192] One of these reports explained that, as of early 1999, the Iraqi Ambassador to the Vatican planned to visit Niger on an official mission. The report noted that subsequently, during meetings on July 5-6, 2000, Niger and Iraq had signed an agreement for the sale of 500 tons of uranium.[193] This report stated that it was providing the "verbatim text" of the agreement.[194] The information was consistent with reporting from 1999 showing that a visit to Niger was being arranged for the Iraqi Ambassador to the Vatican.[195]

Subsequently, Vice President Cheney requested follow-up information from CIA on this alleged deal.[196] CIA decided to contact the former U.S. ambassador to Gabon, Ambassador Joseph Wilson, who had been posted to Niger early in his career and maintained contacts there, to see if he would be amenable to traveling to Niger. Ambassador Wilson agreed to do so and, armed with CIA talking points, traveled to Niger in late February 2002 and met with former Nigerien officials.[197]

Following the trip, CIA disseminated an intelligence report in March 2002 based on its debriefing of Ambassador Wilson.[198] The report carried the caveat that the individuals from whom the Ambassador obtained the information were aware that their remarks could reach the U.S. government and "may have intended to influence as well as to inform."[199] According to this report, the former Prime Minister of Niger said that he was not aware of any contracts for uranium that had been signed between Niger and any rogue states. He noted that if there had been such an agreement, he would have been aware of it.[200] He said, however, that in June 1999 he met with an Iraqi delegation to discuss "expanding commercial relations" between Niger and Iraq, which the Prime Minister interpreted as meaning the delegation wanted to discuss yellowcake sales. The Prime Minister let the matter drop, however, because of the United Nations sanctions on Iraq.[201]

The British Government weighed in officially on the Niger subject on September 24, 2002, when it disseminated a white paper on Iraq's WMD programs stating that "there is intelligence that Iraq has sought the supply of significant quantities of uranium from Africa."[202]

The story grew more complicated when, on October 9, 2002, several days after the NIE was published, an Italian journalist provided a package of documents to the U.S. Embassy in Rome, including documents related to the alleged agreement for the sale of uranium from Niger to Iraq.[203] The State Department passed these documents on to elements of the CIA. Although the documents provided to the Embassy by the Italian journalist related to the purported agreement, these elements of the CIA did not retain copies of the documents or forward them to CIA Headquarters because they had been forwarded through Embassy channels to the State Department.[204]

WINPAC analysts, for their part, only requested and obtained copies of the documents several months later—after State's INR had alerted the Intelligence Community in October 2002 that it had serious doubts about the authenticity of the documents.[205] And, even after this point, CIA continued to respond to policymakers' requests for follow-up on the uranium deal with its established line of analysis, without attempting to authenticate the documents and without noting INR's doubts about the authenticity of the information—despite not having looked at the documents with a critical eye.

For example, in mid-January 2003, the Chairman of the Joint Chiefs of Staff requested information—other than information about the aluminum tubes—about why analysts thought Iraq was reconstituting its nuclear program. In response, WINPAC published a current intelligence paper pointing to Iraqi attempts to procure uranium from several African countries, citing "fragmentary reporting," and making no reference to questions about the authenticity of the source documents.[206] Shortly thereafter, the National Security Council and Office of the Secretary of Defense requested information from the NIO for Strategic and Nuclear Programs and from DIA, respectively, on the uranium deal. The responses included information based on the original reporting, without any mention of the questions about the authenticity of the information.[207]

The CIA had still not evaluated the authenticity of the documents when it coordinated on the State of the Union address, in which the President noted that the "British government has learned that Saddam Hussein recently sought significant quantities of uranium from Africa."[208] Although there is some disagreement about the details of the coordination process, no one in the Intelligence Community had asked that the line be removed.[209] At the time of the State of the Union speech, CIA analysts continued to believe that Iraq probably was seeking uranium from Africa, although there was growing concern among some CIA analysts that there were problems with the reporting.[210]

The IAEA, after receiving copies of the documents from the United States, reviewed them and immediately concluded that they were forgeries.[211] As the IAEA found, the documents contained numerous indications of forgery—flaws in the letterhead, forged signatures, misspelled words, incorrect titles for individuals and government entities, and anomalies in the documents' stamps.[212] The documents also contained serious errors in content. For example, the document describing the agreement made reference to the legal authority for the agreement, but referenced an out-of-date statutory provision. The document also referred to a meeting that took place on "Wednesday, July 7, 2000" even though July 7, 2000 was a Friday.[213]

When it finally got around to reviewing the documents during the same time period, the CIA agreed that they were not authentic. Moreover, the CIA concluded that the original reporting was based on the forged documents and was thus itself unreliable.[214] CIA subsequently issued a recall notice at the beginning of April, 2003 for the three original reports, noting that "the foreign gov-

ernment service may have been provided with fraudulent reporting."[215] On June 17, 2003, CIA produced a memorandum for the Director of Central Intelligence (DCI) stating that "since learning that the Iraq-Niger uranium deal was based on false documents earlier this spring we no longer believe that there is sufficient other reporting to conclude that Iraq pursued uranium from abroad."[216] The NIO for Strategic and Nuclear Programs also briefed the Senate and House Intelligence Committees, on June 18 and 19, respectively, on the CIA's conclusions in this regard.[217]

Given that there were already doubts about the reliability of the reporting on the uranium deal, the Intelligence Community should have reviewed the documents to evaluate their authenticity as soon as they were made available in early October 2002, rather than waiting over six months to do so. The failure to review these documents caused the Intelligence Community to rely on dubious information when providing highly important assessments to policymakers about the likelihood that Iraq was reconstituting its nuclear program. The Community's failure to undertake a real review of the documents—even though their validity was the subject of serious doubts—was a major failure of the intelligence system.[218]

## BIOLOGICAL WARFARE

### Biological Warfare Summary Finding

The Intelligence Community seriously misjudged the status of Iraq's biological weapons program in the 2002 NIE and other pre-war intelligence products. The primary reason for this misjudgment was the Intelligence Community's heavy reliance on a human source—codenamed "Curveball"—whose information later proved to be unreliable.

The Intelligence Community assessed with "high confidence" in the fall of 2002 that Iraq "has" biological weapons, and that "all key aspects" of Iraq's offensive BW program "are active and that most elements are larger and more advanced than they were before the Gulf War."[219] These conclusions were based largely on the Intelligence Community's judgment that Iraq had "transportable facilities for producing" BW agents.[220] That assessment, in turn, was based largely on reporting from a single human source.

Contrary to the Intelligence Community's pre-war assessments, the ISG's post-war investigations concluded that Iraq had unilaterally destroyed its biological weapons stocks and probably destroyed its remaining holdings of bulk BW agent in 1991 and 1992.[221] Moreover, the ISG concluded that Iraq had conducted no research on BW agents since that time, although Iraq had retained some dual-use equipment and intellectual capital.[222] The ISG found no evidence of a mobile BW program.[223]

That Iraq was cooking up biological agents in mobile facilities designed to elude the prying eyes of international inspectors and Western intelligence services was, along with the aluminum tubes, the most important and alarming assessment in the October 2002 NIE. This judgment, as it turns out, was based almost exclusively on information obtained from a single human source—codenamed "Curveball"—whose credibility came into question around the time of the publication of the NIE and collapsed under scrutiny in the months following the war. This section discusses how this ultimately unreliable reporting came to play such a critical role in the Intelligence Community's pre-war assessments about Iraq's BW program. We begin by discussing the evolution of the Intelligence Community's judgments on this issue in the years preceding the second Iraq war; compare these pre-war

assessments with what the ISG found; and, finally, offer our conclusions about the Intelligence Community's performance against the Iraqi BW target, focusing in particular on Curveball and the handling of his information by the Intelligence Community.

We note at the outset that this section includes new information about the failure of the Intelligence Community—and particularly of Intelligence Community management—to convey to policymakers serious concerns about Curveball that arose in the months preceding the invasion of Iraq. Although these findings are significant, we believe that other lessons about the Intelligence Community's assessments of Iraq's purported BW programs are the more critical ones. At bottom, the story of the Intelligence Community's performance on BW is one of poor tradecraft by our human intelligence collection agencies; of our intelligence analysts allowing reasonable suspicions about Iraqi BW activity to turn into near certainty; and of the Intelligence Community failing to communicate adequately the limited nature of their intelligence on Iraq's BW programs to policymakers, in both the October 2002 NIE and other contemporaneous intelligence assessments.

## The Intelligence Community's Pre-War Assessments

The Intelligence Community's assessment of Iraq's BW program—like its judgments about Iraq's other WMD programs—evolved over time. The October 2002 NIE reflected a shift, however, in the Community's judgments about the state of Iraq's BW program. Previous Community estimates had assessed that Iraq *could* have biological weapons; the October 2002 estimate, in contrast, assessed with "high confidence" that Iraq "has" biological weapons. This shift in view, which began in 2000 and culminated in the October 2002 NIE, was based largely on information from a single source—Curveball—who indicated that Iraq had mobile facilities for producing BW agents.

***Background.*** In the early 1990s, the Intelligence Community knew little about Iraq's BW program.[224] Prior to the Gulf War, the Intelligence Community judged that Iraq was developing several BW agents, including anthrax and botulinum toxin, at a number of facilities.[225] The Intelligence Community further assessed that Iraq might have produced up to 1,000 liters of BW agent, and that Iraq had used some of it to fill aerial bombs and artillery shells. At that time, however, the Community judged that it had insufficient information to make assessments about BW agent testing and deployment of filled

munitions.[226] Between 1991 and 1995, the Intelligence Community learned little more about Iraq's BW program. However, there was some additional human intelligence reporting indicating that pre-Gulf War assessments of Iraq's BW program had substantially underestimated the quantities of biological weapons that Iraq had produced. Moreover, this reporting suggested that the Intelligence Community was unaware of some Iraqi BW facilities.[227]

It was not until 1995—when UNSCOM presented the Iraqis with evidence of continuing BW-related imports and Saddam Hussein's son-in-law, Hussein Kamil, defected—that Iraq made substantial declarations to the United Nations about its activities prior to the Gulf War, admitting that it had produced and weaponized BW agents.[228] These declarations confirmed that the Intelligence Community had substantially underestimated the scale and maturity of Iraq's pre-Desert Storm BW program. Iraq had, before the Gulf War, weaponized several agents, including anthrax, botulinum toxin, and aflatoxin; produced 30,165 liters of BW agent; and deployed some of its 157 bombs and 25 missile warheads armed with BW agents to locations throughout Iraq.[229] Following these declarations, the Intelligence Community estimated in 1997 that Iraq was still concealing elements of its BW program, and it assessed that Iraq would likely wait until either sanctions were lifted or the UNSCOM presence was reduced before restarting agent production. [230]

After 1998, the Intelligence Community found it difficult to determine whether activity at known dual-use facilities was related to WMD production. The departed inspectors had never been able to confirm what might be happening at Iraq's suspect facilities. Accordingly, the Intelligence Community noted that it had no reliable intelligence to indicate resumed production of biological weapons, but assessed that in the absence of inspectors Iraq *probably* would expand its BW activities.[231] These assessments were colored by the Community's earlier underestimation of Iraq's programs, its lack of reliable intelligence, and its realization that previous underestimates were due in part to effective deception by the Iraqis.[232] By 1999, the CIA assessed that there was some Iraqi research and development on BW and that Iraq could restart production of biological weapons within a short period of time. The 1999 NIE on Worldwide BW Programs judged that Iraq was "revitalizing its BW program" and was "probably continuing work to develop and produce BW agents."[233]

***Growing concern.*** The Intelligence Community's concern about Iraq's BW program increased in early 2000, and the Community began to adjust upward its estimates of the Iraq BW threat, based on a "substantial volume" of "new information" regarding mobile BW facilities in Iraq.[234] This information came from an Iraqi chemical engineer, subsequently codenamed Curveball, who came to the attention of the Intelligence Community through a foreign liaison service. That liaison service debriefed Curveball and then shared the debriefing results with the United States. The foreign liaison service would not, however, provide the United States with direct access to Curveball. Instead, information about Curveball was passed from the liaison service to DIA's Defense HUMINT Service, which in turn disseminated information about Curveball throughout the Intelligence Community.

Between January 2000 and September 2001, DIA's Defense HUMINT Service disseminated almost 100 reports from Curveball regarding mobile BW facilities in Iraq.[235] These reports claimed that Iraq had several mobile production units and that one of those units had begun production of BW agents as early as 1997.[236]

Shortly after Curveball started reporting, in the spring of 2000, his information was provided to senior policymakers.[237] It was also incorporated into an update to a 1999 NIE on Worldwide BW Programs. The update reported that "new intelligence acquired in 2000…causes [the IC] to adjust our assessment upward of the BW threat posed by Iraq…The new information suggests that Baghdad has expanded its offensive BW program by establishing a large-scale, redundant, and concealed BW agent production capability."[238] In December 2000, the Intelligence Community produced a Special Intelligence Report that was based on reporting from Curveball, noting that "credible reporting from a single source suggests" that Iraq has produced biological agents, but cautioned that "[w]e cannot confirm whether Iraq has produced…biological agents."[239]

By 2001, however, the assessments became more assertive. A WINPAC report in October 2001, also based on Curveball's reporting about mobile facilities, judged "that Iraq continues to produce at least…three BW agents" and possibly two others. This assessment also concluded that "the establishment of mobile BW agent production plants and continued delivery system development provide Baghdad with BW capabilities surpassing the pre-Gulf War era."[240] Similar assessments were provided to senior policymakers.[241] In late

September 2002, DCI Tenet told the Senate's Intelligence and Armed Services Committees (and subsequently the Senate Foreign Relations Committee) that "we know Iraq has developed a redundant capability to produce biological warfare agents using mobile production units."[242]

***October 2002 NIE.*** The October 2002 NIE reflected this upward assessment of the Iraqi BW threat that had developed since Curveball began reporting in January 2000. The October 2002 NIE reflected the shift from the late-1990s assessments that Iraq *could* have biological weapons to the definitive conclusion that Iraq "has" biological weapons, and that its BW program was larger and more advanced than before the Gulf War.[243] Information about Iraq's dual-use facilities and its failure to account fully for previously declared stockpiles contributed to this shift in assessments.[244] The information that Iraq had mobile BW production units, however, was instrumental in adjusting upward the assessment of Iraq's BW threat.[245] And for this conclusion, the NIE relied primarily on reporting from Curveball, who, as noted, provided a large volume of reporting through Defense HUMINT channels regarding mobile BW production facilities in Iraq.[246] Only in May 2004, more than a year after the commencement of Operation Iraqi Freedom, did CIA formally deem Curveball's reporting fabricated and recall it.[247] At the time of the NIE, however, reporting from three other human sources—who provided one report each on mobile BW facilities—was thought to have corroborated Curveball's information about the mobile facilities.[248] These three sources also proved problematic, however, as discussed below.

Another asylum seeker (hereinafter "the second source") reporting through Defense HUMINT channels provided one report in June 2001 that Iraq had transportable facilities for the production of BW.[249] This second source recanted in October 2003, however, and the recantation was reflected in a Defense HUMINT report in which the source flatly contradicted his June 2001 statements about transportable facilities.[250] Though CIA analysts told Commission staff that they had requested that Defense HUMINT follow-up with this second source to ascertain the reasons for his recantation, DIA's Defense HUMINT Service has provided no further information on this issue.[251] Nor, for that matter, was the report ever recalled or corrected.[252]

Another source, associated with the Iraqi National Congress (INC) (hereinafter "the INC source"), was brought to the attention of DIA by Washington-based representatives of the INC. Like Curveball, his reporting was handled

by Defense HUMINT. He provided one report that Iraq had decided in 1996 to establish mobile laboratories for BW agents to evade inspectors.[253] Shortly after Defense HUMINT's initial debriefing of the INC source in February 2002, however, a foreign liaison service and the CIA's Directorate of Operations (DO) judged him to be a fabricator and recommended that Defense HUMINT issue a notice to that effect, which Defense HUMINT did in May 2002. Senior policymakers were informed that the INC source and his reporting were unreliable. The INC source's information, however, began to be used again in finished intelligence in July 2002, including the October 2002 NIE, because, although a fabrication notice had been issued several months earlier, Defense HUMINT had failed to recall the reporting.[254]

The classified report here discusses a fourth source (hereinafter "the fourth source") who provided a single report that Iraq had mobile fermentation units mounted on trucks and railway cars.

***Post-NIE.*** After publication of the NIE in October 2002, the Intelligence Community continued to assert that Baghdad's biological weapons program was active and posed a threat, relying on the same set of sources upon which the NIE's judgments were based.[255] For example, a November 2002 paper produced by CIA's Directorate of Intelligence (DI) reiterated the NIE's assessment that Iraq had a "broad range of lethal and incapacitating agents" and that the "BW program is more robust than it was prior to the Gulf War."[256] The piece contended that Iraq was capable of producing an array of agents and probably retained strains of the smallpox virus. It further argued that technological advances increased the potential Iraqi BW threat to U.S. interests. And a February 2003 CIA Intelligence Assessment anticipated Iraqi options for BW (and CW) use against the United States and other members of the Coalition; the report stated that Iraq "maintains a wide range of…biological agents and delivery systems" and enumerated 21 BW agents which it judged Iraq could employ.[257]

Statements about biological weapons also appeared in Administration statements about Iraq in the months preceding the war. Secretary of State Colin Powell's speech to the United Nations Security Council on February 5, 2003, relied on the same human sources relied upon in the NIE.[258] Secretary Powell was not informed that one of these sources—the INC source—had been judged a fabricator almost a year earlier. And as will be discussed at length below, serious doubts about Curveball had also surfaced within CIA's Direc-

torate of Operations at the time of the speech—but these doubts also were not communicated to Secretary Powell before his United Nations address.

Reliance on Curveball's reporting also affected post-war assessments of Iraq's BW program. A May 2003 CIA Intelligence Assessment pointed to the post-invasion discovery of "two probable mobile BW agent productions plants" by Coalition forces in Iraq as evidence that "Iraq was hiding a biological warfare program."[259] Curveball, when shown photos of the trailers, identified components that he said were similar to those on the mobile BW production facilities that he had described in his earlier reporting.[260]

## Post-War Findings of the Iraq Survey Group

The Iraq Survey Group found that the Intelligence Community's pre-war assessments about Iraq's BW program were almost entirely wrong. The ISG concluded that "Iraq appears to have destroyed its undeclared stocks of BW weapons and probably destroyed remaining holdings of bulk BW agent" shortly after the Gulf War.[261] According to the ISG, Iraq initially intended to retain elements of its biological weapons program after the Gulf War. UNSCOM inspections proved unexpectedly intrusive, however, and to avoid detection, Saddam Hussein ordered his son-in-law and Minister of the Military Industrial Commission Hussein Kamil to destroy, unilaterally, Iraq's stocks of BW agents.[262] This took place in either the late spring or summer of 1991.[263] But Iraq retained a physical plant at Al-Hakam and the intellectual capital necessary to resuscitate the BW program.[264] Simultaneously, Iraq embarked on an effort to hide this remaining infrastructure and to conceal its pre-war BW-related activities.[265]

In early 1995, however, UNSCOM inspectors confronted Iraqi officials with evidence of 1988 imports of bacterial growth media in quantities that had no civilian use within Iraq's limited biotechnology industry.[266] This confrontation, followed by the defection of Hussein Kamil in August 1995, prompted Iraq to admit that it had produced large quantities of bulk BW agent before the Gulf War.[267] Iraq also released a large cache of documents and issued the first of several "Full, Final and Complete Declaration[s]" on June 22, 1996, further detailing its BW program. UNSCOM subsequently supervised the destruction of BW-related facilities at Al-Hakam in 1996.[268]

The Iraq Survey Group found that the destruction of the Al-Hakam facility effectively marked the end of Iraq's large-scale BW ambitions.[269] The ISG did judge that after 1996 Iraq "continued small-scale BW-related efforts" under the auspices of the Iraqi Intelligence Service, and also retained a trained cadre of scientists who could work on BW programs and some dual-use facilities capable of conversion to small-scale BW agent production.[270] Nevertheless, the ISG "found no direct evidence that Iraq, after 1996, had plans for a new BW program or was conducting BW-specific work for military purposes."[271]

With respect to mobile BW production facilities, the "ISG found no evidence that Iraq possessed or was developing production systems on road vehicles or railway wagons."[272] The ISG's "exhaustive investigation" of the two trailers captured by Coalition forces in spring 2003 revealed that the trailers were "almost certainly designed and built exclusively for the generation of hydrogen." The ISG judged that the trailers "cannot … be part of any BW program."[273]

## Analysis of the Intelligence Community's Pre-War Assessments

The Intelligence Community fundamentally misjudged the status of Iraq's BW programs. As the above discussion demonstrates, the central basis for the Intelligence Community's pre-war assessments about Iraq's BW program was the reporting of a single human source, Curveball. This single source, whose reporting came into question in late 2002, later proved to be a fabricator.

Our intelligence agencies get burned by human sources sometimes—it is a fact of life in the murky world of espionage. If our investigation revealed merely that our Intelligence Community had a source who later turned out to be lying, despite the best tradecraft practices designed to ferret out such liars, that would be one thing. But Curveball's reporting became a central part of the Intelligence Community's pre-war assessments through a serious breakdown in several aspects of the intelligence process. The Curveball story is at the same time one of poor asset validation by our human collection agencies; of a tendency of analysts to believe that which fits their theories; of inadequate communication between the Intelligence Community and the policymakers it serves; and, ultimately, of poor leadership and management. This

section thus focuses primarily on our investigation of the Curveball episode, and the findings we drew from it.

### Biological Warfare Finding 1

The DIA's Defense HUMINT Service's failure even to attempt to validate Curveball's reporting was a major failure in operational tradecraft.

The problems with the Intelligence Community's performance on Curveball began almost immediately after the source first became known to the U.S. government in early 2000. As noted above, Curveball was not a source who worked directly with the United States; rather, the Intelligence Community obtained information about Curveball through a foreign service. The foreign service would not provide the United States with direct access to Curveball, claiming that Curveball would refuse to speak to Americans.[274] Instead, the foreign intelligence service debriefed Curveball and passed the debriefing information to DIA's Defense HUMINT Service, the human intelligence collection agency of the Department of Defense.

The lack of direct access to Curveball made it more difficult to assess his veracity. But such lack of access does not preclude the Intelligence Community from attempting to assess the source's bona fides and the credibility of the source's reporting. Indeed, it is incumbent upon professional intelligence officers to attempt to do so, through a process referred to within the Intelligence Community as "vetting" or "asset validation."

Defense HUMINT, however, did not even attempt to determine Curveball's veracity. A Defense HUMINT official explained to Commission staff that Defense HUMINT believed that it was just a "conduit" for Curveball's reporting—that it had no responsibility for vetting Curveball or validating his information.[275] In Defense HUMINT's view, asset validation is solely the responsibility of analysts—in their judgment if the analysts believe the information is credible, then the source is validated.[276] This line echoes what Defense HUMINT officials responsible for disseminating Curveball's reporting told the Senate Select Committee on Intelligence; they told the Committee that it was not their responsibility to assess the source's credibility, but that it instead was up to the analysts who read the reports to judge the accuracy of the contents.[277]

The Senate Select Committee on Intelligence concluded that this view represents a "serious lapse" in tradecraft, and we agree.[278] Analysts obviously play a crucial role in validating sources by evaluating the credibility of their reporting, corroborating that reporting, and reviewing the body of reporting to ensure that it is consistent with the source's access. But analysts' validation can only extend to whether what a source says is internally consistent, technically plausible, and credible given the source's claimed access. The process of validation also must include efforts by the operational elements to confirm the source's bona fides (*i.e.*, authenticating that the source has the access he claims), to test the source's reliability and motivations, and to ensure that the source is free from hostile control.[279] To be sure, these steps are particularly difficult for a source such as Curveball, to whom the collection agency has no direct access. But human intelligence collectors can often obtain valuable information weighing on even a liaison source's credibility, and the CIA's DO routinely attempts to determine the credibility even of sources to whom it has no direct access. In light of this, we are surprised by the Defense HUMINT's apparent position that it had no responsibility even to *attempt* to validate Curveball.

As a footnote to this episode, while DIA's Defense HUMINT Service felt no obligation to vet Curveball or validate his veracity, it would later appear affronted that another agency—CIA—would try to do so. On February 11, 2003, after questions about Curveball's credibility had begun to emerge, an element of the DO sent a message to Defense HUMINT officials expressing concern that Curveball had not been vetted. The next day the Defense HUMINT division chief who received that message forwarded it by electronic mail to a subordinate, requesting input to answer CIA's query. In that electronic mail message, the Defense HUMINT division chief said he was "shocked" by CIA's suggestion that Curveball might be unreliable. The reply—which the Defense HUMINT official intended for Defense HUMINT recipients only but which was inadvertently sent to CIA as well—observed that "CIA is up to their old tricks" and that CIA did not "have a clue" about the process by which Curveball's information was passed from the foreign service.[280]

**Biological Warfare Finding 2**

Indications of possible problems with Curveball began to emerge well before the 2002 NIE. These early indications of problems—which suggested unstable behavior more than a lack of credibility—were discounted by the analysts working the Iraq WMD account. But given these warning signs, analysts should have viewed Curveball's information with greater skepticism and should have conveyed this skepticism in the NIE. The analysts' resistance to any information that could undermine Curveball's reliability suggests that the analysts were unduly wedded to a source that supported their assumptions about Iraq's BW programs.

As we have discussed, when information from Curveball first surfaced in early 2000, Defense HUMINT did nothing to validate Curveball's reporting. Analysts within the Intelligence Community, however, did make efforts to assess the credibility of the information provided by Curveball. In early 2000, when Curveball's reporting first surfaced, WINPAC analysts researched previous reporting and concluded that Curveball's information was plausible based upon previous intelligence, including imagery reporting, and the detailed, technical descriptions of the mobile facilities he provided.[281] As a WINPAC BW analyst later told us, there was nothing "obviously wrong" with Curveball's information, and his story—that Iraq had moved to a mobile capability for its BW program in 1995 in order to evade inspectors—was logical in light of other known information.[282]

At about the same time, however, traffic in the CIA's Directorate of Operations began to suggest some possible problems with Curveball.[283] The first CIA concerns about Curveball's reliability arose within the DO in May 2000, when a Department of Defense detailee assigned to the DO met Curveball. The purpose of the meeting was to evaluate Curveball's claim that he had been present during a BW accident that killed several of his coworkers by seeing whether Curveball had been exposed to, or vaccinated against, a BW agent.[284] Although the evaluation was ultimately inconclusive,[285] the detailee raised several concerns about Curveball based on their interaction.

First, the detailee observed that Curveball spoke excellent English during their meeting.[286] This was significant to the detailee because the foreign service had, on several earlier occasions, told U.S. intelligence officials that one

reason a meeting with Curveball was impossible was that Curveball did not speak English. Second, the detailee was concerned by Curveball's apparent "hangover" during their meeting. The detailee conveyed these impressions of Curveball informally to CIA officials, and WINPAC BW analysts told Commission staff that they were aware that the detailee was concerned that Curveball might be an alcoholic.[287] This message was eventually re-conveyed to Directorate of Operations supervisors via electronic mail on February 4, 2003—literally on the eve of Secretary Powell's speech to the United Nations. The electronic mail stated, in part:

> I do have a concern with the validity of the information based on Curveball having a terrible hangover the morning of [the meeting]. I agree, it was only a one time interaction, however, he knew he was to have a [meeting] on that particular morning but tied one on anyway. What underlying issues could this be a problem with and how in depth has he been vetted by the [foreign liaison service]?[288]

By early 2001, the DO was receiving operational messages about the foreign service's difficulties in handling Curveball, whom the foreign service reported to be "out of control," and whom the service could not locate.[289] This operational traffic regarding Curveball was shared with WINPAC's Iraq BW analysts because, according to WINPAC analysts, the primary BW analyst who worked on the Iraq issue had close relations with the DO's Counterproliferation Division (the division through which the operational traffic was primarily handled).[290] This and other operational information was not, however, shared with analysts outside CIA.[291]

A second warning on Curveball came in April 2002, when a foreign intelligence service, which was also receiving reporting from Curveball, told the CIA that, in its view, there were a variety of problems with Curveball. The foreign service began by noting that they were "inclined to believe that a significant part of [Curveball's] reporting is true" in light of his detailed technical descriptions.[292] In this same message, however, the foreign service noted that it was "not convinced that Curveball is a wholly reliable source," and that "elements of [Curveball's] behavior strike us as typical of individuals we would normally assess as fabricators."[293] Even more specifically, the foreign service noted several inconsistencies in Curveball's reporting which caused the foreign service "to have doubts about Curveball's reliability."[294] It should

be noted here that, like the handling foreign service, this other service continued officially to back Curveball's reporting throughout this period.

Again, these concerns about Curveball were shared with CIA analysts working on the BW issue.[295] But none of the expressed concerns overcame analysts' ultimate confidence in the accuracy of his information. Specifically, analysts continued to judge his information credible based on their assessment of its detail and technical accuracy, corroborating documents, confirmation of the technical feasibility of the production facility designs described by Curveball, and reporting from another human source, the fourth source mentioned above.[296] But it should be noted that during the pre-NIE period—in addition to the more general questions about Curveball's credibility discussed above—at least some evidence had emerged calling into question the substance of Curveball's reporting about Iraq's BW program as well.[297]

Specifically, a WINPAC BW analyst told us that two foreign services had both noted in 2001 that Curveball's description of the facility he claimed was involved in the mobile BW program was contradicted by imagery of the site, which showed a wall across the path that Curveball said the mobile trailers traversed. Intelligence Community analysts "set that information aside," however, because it could not be reconciled with the rest of Curveball's information, which appeared plausible.[298] Analysts also explained away this discrepancy by noting that Iraq had historically been very successful in "denial and deception" activities and speculated that the wall spotted by imagery might be a temporary structure put up by the Iraqis to deceive U.S. intelligence efforts.[299]

Analysts' use of denial and deception to explain away discordant evidence about Iraq's BW programs was a recurring theme in our review of the Community's performance on the BW question.[300] Burned by the experience of being wrong on Iraq's WMD in 1991 and convinced that Iraq was restarting its programs, analysts dismissed indications that Iraq had actually abandoned its prohibited programs by chalking these indicators up to Iraq's well-known denial and deception efforts. In one instance, for example, WINPAC analysts described reporting from the second source indicating Iraq was filling BW warheads at a transportable facility near Baghdad. When imagery was unable to locate the transportable BW systems at the reported site, analysts assumed this was not because the activity was not taking place, but rather because Iraq was hiding activities from U.S. satellite overflights.[301] This tendency was best

encapsulated by a comment in a memorandum prepared by the CIA for a senior policymaker: "Mobile BW information comes from [several] sources, one of whom is credible and the other is of undetermined reliability. We have raised our collection posture in a bid to locate these production units, but years of fruitless searches by UNSCOM indicate they are well hidden."[302] Again, the analysts appear never to have considered the idea that the searches were fruitless because the weapons were not there.

### Biological Warfare Finding 3

The October 2002 NIE failed to communicate adequately to policymakers both the Community's near-total reliance on Curveball for its BW judgments, and the serious problems that characterized Curveball as a source.

The Community erred in failing to highlight its overwhelming reliance on Curveball for its BW assessments. The NIE judged that Iraq "has transportable facilities for producing bacterial and toxin BW agents" and attributed this judgment to multiple sources.[303] In reality, however, on the topic of mobile BW facilities Curveball provided approximately 100 detailed reports on the subject, while the second and fourth sources each provided a single report. (As will be discussed in greater detail below, the reporting of another source—the INC source—had been deemed a fabrication months earlier, but nonetheless found its way into the October 2002 NIE.)[304] The presentation of the material as attributable to "multiple sensitive sources," however, gave the impression that the support for the BW assessments was more broadly based than was in fact the case. A more accurate presentation would have allowed senior officials to see just how narrow the evidentiary base for the judgments on Iraq's BW programs actually was.

Other contemporaneous assessments about Iraq's BW program also reflect this problem. For example, the Intelligence Community informed senior policymakers in July 2002 that CIA judged that "Baghdad has transportable production facilities for BW agents…according to defectors."[305] Again, while three "defector" sources (Curveball, the second source, and the INC source) are cited in this report, Curveball's reporting was the overwhelmingly predominant source of the information.

And the NIE should not only have emphasized its reliance on Curveball for its BW judgments; it should also have communicated the limitations of the source himself. The NIE, for instance, described him as "an Iraqi defector deemed credible by the [Intelligence Community]."[306] The use of the term "credible" was apparently meant to imply only that Curveball's reporting was technically plausible. To a lay reader, however, it implied a broader judgment as to the source's general reliability. This description obscured a number of salient facts that, given the Community's heavy reliance upon his reporting, would have been highly important for policymakers to know—including the fact that the Community had never gained direct access to the source and that he was known at the time to have serious handling problems. While policymakers may still have credited his reporting, they would at least have been warned about the risks in doing so.

### Biological Warfare Finding 4

Beginning in late 2002, some operations officers within the regional division of the CIA's Directorate of Operations that was responsible for relations with the liaison service handling Curveball expressed serious concerns about Curveball's reliability to senior officials at the CIA, but these views were either (1) not thought to outweigh analytic assessments that Curveball's information was reliable or (2) disregarded because of managers' assessments that those views were not sufficiently convincing to warrant further elevation.

After the NIE was published, but before Secretary Powell's speech to the United Nations, more serious concerns surfaced about Curveball's reliability. These concerns were never brought to Secretary Powell's attention, however. Precisely how and why this lapse occurred is the subject of dispute and conflicting memories. This section provides only a brief summary of the key events in this complicated saga.

The NIE went to press in early October 2002, but its publication did not end the need to scrutinize Curveball's reliability. To improve the CIA's confidence in Curveball, the CIA's Deputy Director for Operations (DDO), James Pavitt, sought to press the foreign intelligence service for access to Curveball.[307] Mr. Pavitt's office accordingly asked the chief ("the division chief") of the DO's regional division responsible for relations with the liaison service ("the division") to meet with a representative of the foreign intelligence service to make

the request for access.[308] According to the division chief, he met with the representative in late September or early October 2002.[309]

At the lunch, the division chief raised the issue of U.S. intelligence officials speaking to Curveball directly. According to the division chief, the representative of the foreign intelligence service responded with words to the effect of "You don't want to see him [Curveball] because he's crazy." Speaking to him would be, in the representative of the foreign service's words, "a waste of time." The representative, who said that he had been present for debriefings of Curveball, continued that his intelligence service was not sure whether Curveball was actually telling the truth and, in addition, that he had serious doubts about Curveball's mental stability and reliability; Curveball, according to the representative, had had a nervous breakdown. Further, the representative said that he worried that Curveball was "a fabricator." The representative cautioned the division chief, however, that the foreign service would publicly and officially deny these views if pressed. The representative told the division chief that the rationale for such a public denial would be that the foreign service did not wish to be embarrassed.[310] According to the division chief, he passed the information to three offices: up the line to the office of CIA's Deputy Director for Operations;[311] down the line to his staff, specifically the division's group chief ("the group chief") responsible for the liaison country's region;[312] and across the agency to WINPAC.[313] At the time, the division chief thought that the information was "no big deal" because he did not realize how critical Curveball's reporting was to the overall case for Iraqi possession of a biological weapons program.[314] He assumed there were other streams of reporting to buttress the Intelligence Community's assessments. He could not imagine, he said, that Curveball was "it."[315]

Several months later, prompted by indications that the President or a senior U.S. official would soon be making a speech on Iraq's WMD programs, one of the executive assistants for the then-Deputy Director of Central Intelligence (DDCI) John McLaughlin[316] met with the group chief to look into the Curveball information.[317] This meeting took place on December 18, 2002.[318] Although the executive assistant did not specifically recall the meeting when he spoke with Commission staff,[319] an electronic mail follow-up from the meeting—which was sent to the division chief and the group chief—makes clear that the meeting was called to discuss Curveball and the public use of his information.[320]

As a result of this meeting, the division sent a message that same afternoon to the CIA's station in the relevant country again asking that the foreign intelligence service permit the United States to debrief Curveball.[321] The message stressed the importance of gaining access to Curveball, and noted the U.S. government's desire to use Curveball's reporting publicly. On December 20, the foreign service refused the request for access, but concurred with the request to use Curveball's information publicly—"with the expectation of source protection."[322]

By this point, it was clear that the division believed there was a serious problem with Curveball that required attention. A second meeting was scheduled on December 19 at the invitation of DDCI McLaughlin's same executive assistant.[323] According to the executive assistant, he called the meeting because it had become apparent to DDCI McLaughlin that Curveball's reporting was significant to the Intelligence Community's judgments on Iraq's mobile BW capability.[324] The invitation for the meeting stated that the purpose was to "resolve precisely how we judge Curveball's reporting on mobile BW labs," and that the executive assistant hoped that after the meeting he could "summarize [the] conclusions in a short note to the DDCI."[325] The meeting was attended by the executive assistant, a WINPAC BW analyst, an operations officer from the DO's Counterproliferation Division, and the regional division's group chief. Mr. McLaughlin, who did not attend this meeting, told this Commission that he was not given a written summary of the meeting and did not recall whether any such meeting was held.[326]

Although individuals' recollections of the meeting vary somewhat, there is little disagreement on the meeting's substance. The group chief argued that Curveball had not been adequately "vetted" and that his information should therefore not be relied upon. In preparation for the meeting, the group chief had outlined her concerns in an electronic mail to several officers within the Directorate of Operations—including Stephen Kappes, the then-Associate Deputy Director for Operations. The electronic mail opened with the following (in bold type):

> Although no one asked, it is my assessment that Curve Ball had some access to some of this information and was more forthcoming and cooperative when he needed resettlement assistance; now that he does not need it, he is less helpful, possibly because when he was being helpful, he was embellishing, a bit. The [foreign service] ha[s] devel-

> oped some doubts about him. We have been unable to vet him operationally and know very little about him. The intelligence community has corroborated portions of his reporting with open source information …and some intelligence (which appears to confirm that things are where he said they were).[327]

At the meeting, the group chief stated that she told the attendees that the division's concerns were based on the foreign service representative's statements to the division chief, the CIA's inability to get access to Curveball, the significant "improvement" in Curveball's reporting over time, the decline of Curveball's reporting after he received the equivalent of a green card, among other reasons.[328] She also recalled telling the attendees the details of the foreign service representative's statements to the division chief.[329] In the group chief's view, she made it clear to all the attendees that the division did not believe that Curveball's information should be relied upon.[330]

With equal vigor, the WINPAC representative argued that Curveball's reporting was fundamentally reliable.[331] According to the WINPAC analyst, Curveball's information was reliable because it was detailed, technically accurate, and corroborated by another source's reporting.[332]

Both the group chief and the WINPAC analyst characterized the exchange as fairly heated.[333] Both of the two primary participants also recalled providing reasons why the other's arguments should not carry the day. Specifically, the group chief says she argued, adamantly, that the supposedly corroborating information was of dubious significance because it merely established that Curveball had been to the location, not that he had any knowledge of BW activities being conducted there. In addition, the group chief questioned whether some of Curveball's knowledge could have come from readily available, open source materials.[334] Conversely, the WINPAC BW analyst says that she questioned whether the group chief had sufficient knowledge of Curveball's reporting to be able to make an accurate assessment of his reliability.[335]

It appears that WINPAC prevailed in this argument. Looking back, the executive assistant who had called the meeting offered his view that the WINPAC BW analyst was the "master of [the Curveball] case," and that he "look[ed] to her for answers."[336] He also noted that the group chief clearly expressed her skepticism about Curveball during the meeting, and that she fundamentally took the position that Curveball's reporting did not "hold up."[337] The executive assis-

tant further said that while the foreign service officially assessed that Curveball was reliable, they also described him as a "handling problem."[338] According to the executive assistant, the foreign service said Curveball was a handling problem because he was a drinker, unstable, and generally difficult to manage. In the executive assistant's view, however, it was impossible to know whether the foreign service's description of Curveball was accurate. Finally, the executive assistant said that he fully recognized Curveball's significance at the time of the meeting; that Curveball "was clearly the most significant source" on BW; and that if Curveball were removed, the BW assessment was left with one other human source, "but not much more."[339]

The following day, the executive assistant circulated a memorandum to the WINPAC BW analyst intended to summarize the prior day's meeting.[340] Perhaps in keeping with his reliance on the WINPAC BW analyst as the "master of the case," the executive assistant's "summary" of the draft of the memorandum, titled "Reliability of Human Reporting on Iraqi Mobile BW Capability," played down the doubts raised by the DO division:

> The primary source of this information is an Iraqi émigré (vice defector) …After an exhaustive review, the U.S. Intelligence Community—[as well as several liaison services]…judged him credible. This judgment was based on:
>
> - The detailed, technical nature of his reporting;
> - [Technical intelligence] confirming the existence/configuration of facilities he described (one Baghdad office building is known to house administrative offices linked to WMD programs);
> - UNSCOM's discovery of military documents discussing "mobile fermentation" capability;
> - Confirmation/replication of the described design by U.S. contractors (it works); and
> - Reporting from a second émigré that munitions were loaded with BW agent from a mobile facility parked[341] within an armaments center south of Baghdad.[342]

The memorandum then continued on to note that "[w]e are handicapped in efforts to resolve legitimate questions that remain about the source's veracity and reporting because the [foreign service] refuses to grant direct access to the source."[343] Later, in the "Questions/Answers" section, the memorandum stated:

> **How/when was the source's reliability evaluated**—[One foreign service] hosted a…meeting in 2001, over the course of which all the participating services judged the core reporting as "reliable." [One of the other services] recently affirmed that view—although the [service] ha[s] declined to provide details of sources who might provide corroboration. Operational traffic…indicates the [hosting foreign service] may now be downgrading its own evaluation of the source's reliability.[344]

It does not appear that this memorandum was circulated further; rather, the executive assistant explained that he would have used the memorandum to brief the DDCI at their daily staff meeting.[345]

Former DDCI McLaughlin, however, said that he did not remember being apprised of this meeting.[346] Mr. McLaughlin told the Commission that, although he remembered his executive assistant at some point making a passing reference to the effect that the executive assistant had heard about some issues with Curveball, he (Mr. McLaughlin) did not remember having ever been told in any specificity about the DO division's doubts about Curveball.[347] Mr. McLaughlin added that, at the same time, he was receiving assurances from the relevant analysts to the effect that Curveball's information appeared good.[348]

At about the same time, the division apparently tried another route to the top. Within a day or so after the December 19 meeting, the division's group chief said that she and the division chief met with James Pavitt (the Deputy Director for Operations) and Stephen Kappes (the Associate Deputy Director for Operations).[349] At this meeting, according to the group chief, she repeated the Division's concerns about Curveball.[350] But according to the group chief, Mr. Pavitt told her that she was not qualified to make a judgment about Curveball, and that judgments about Curveball should be made by analysts.[351]

When asked about this meeting by Commission staff, Mr. Pavitt said that although he knew there were handling problems with Curveball, he did not

recall any such meeting with the division chief or the group chief.[352] Mr. Pavitt added, however, that he would have agreed that the call was one for the analysts to make. He also noted that he does not recall being aware, in December 2002, that Curveball was such a central source of information for the Intelligence Community's mobile BW judgments.[353] For his part, Mr. Kappes does not specifically recall this meeting, although he said that the concerns about Curveball were generally known within the CIA. He also said that he did not become aware of the extensive reliance on Curveball until after the war.[354]

That is where matters stood for about a month. But the issue arose once again in January 2003. During December and January, it became clear that the Secretary of State would be making an address on Iraq to the United Nations Security Council and that presenting American intelligence on Iraq's WMD programs would be a major part of the speech. In late January, the Secretary began "vetting" the intelligence in a series of long meetings at the CIA's Langley headquarters. In connection with those preparations, a copy of the speech was circulated so that various offices within CIA could check it for accuracy and ensure that material could be used without inappropriately disclosing sources and methods.[355] As part of that process, the group chief received a copy.[356] According to the group chief, she said that she "couldn't believe" the speech relied on Curveball's reporting, and immediately told the division chief about the situation.[357] The group chief also said that she edited the language in a way that made the speech more appropriate.[358]

According to the division chief, he was given the draft speech by an assistant, and he immediately redacted material based on Curveball's reporting. He then called the DDCI's executive assistant and asked to speak to the DDCI about the speech.[359] When interviewed by Commission staff, the executive assistant did not recall having any such conversation with the division chief, nor did he remember seeing a redacted copy of the speech.[360] However, another Directorate of Operations officer, who was responsible for evaluating the possible damage to DO sources from the release of information in the speech, remembers being approached during this time by the division chief. According to this officer, the division chief said he was concerned about the proposed inclusion of Curveball's information in the Powell speech and that the handling service itself thought Curveball was a "flake."

The DO officer responsible for sources and methods protection summarized these concerns in an electronic mail which he sent to another of the DDCI's aides for passage to the DDCI. The DO officer responsible for sources and methods did not recall that the division chief made any specific redactions of language from the draft.[361] The DDCI's executive assistant has no recollection of such an electronic mail or of any concerns expressed about Curveball.[362]

Later that afternoon, according to the division chief, he met with the DDCI to discuss the speech. The division chief recounted that he told the DDCI that there was a problem with the speech because it relied on information from Curveball, and that—based on his meeting with the foreign intelligence service representative—the division chief thought that Curveball could be a fabricator.[363] Although the division chief told the Commission that he could not remember the DDCI's exact response, he got the impression that this was the first time that the DDCI had heard of a problem with Curveball. Specifically, the division chief recalled that the DDCI, on hearing that Curveball might be a fabricator, responded to the effect of: "Oh my! I hope that's not true."[364] It was also at this time, according to the division chief, that he (the division chief) first learned that Curveball provided the primary support for the Intelligence Community's judgments on BW.

The group chief provided indirect confirmation of the exchange; she remembered the division chief telling her about this exchange shortly after it occurred.[365] Similarly, former DDO James Pavitt told the Commission that he remembered the division chief subsequently relating to him that the division chief had raised concerns about Curveball to the DDCI around the time of the Secretary of State's speech.[366]

By contrast, former DDCI McLaughlin told the Commission that he did not remember any such meeting with the division chief. Specifically, the former DDCI said that he was not aware of the division chief contacting his (Mr. McLaughlin's) executive assistant to set up a meeting about Curveball; there was no such meeting on his official calendar; he could not recall ever talking to the division chief about Curveball; and he was not aware of any recommended redactions of sections of the draft speech based on Curveball's reporting. Moreover, Mr. McLaughlin told the Commission that the division chief never told him that Curveball might be a fabricator.[367] The former DDCI added that it is inconceivable that he would have permitted

information to be used in Secretary Powell's speech if reservations had been raised about it.[368]

On January 24, 2003, the CIA sent another message to the CIA's relevant station asking for the foreign intelligence service's "transcripts of actual questions asked of, and response given by, Curveball concerning Iraq's BW program not later than …COB [close of business], 27 January 2003." The message further noted that the CIA had "learned that [the President] intend[ed] to refer to the Curveball information in a planned United Nations General Assembly (UNGA) speech on 29 January 2003." According to the division chief, this message was sent on behalf of the DCI's office, but was "released" by the group chief.[369]

Three days later, on January 27, 2003, the relevant station responded and said that they were still attempting to obtain the transcripts. The message then noted:

> [The foreign liaison service handling Curveball] has not been able to verify his reporting. [This foreign service] has discussed Curveball with US [and others], but no one has been able to verify this information…. The source himself is problematical. Defer to headquarters but to use information from another liaison service's source whose information cannot be verified on such an important, key topic should take the most serious consideration.[370]

Shortly after these messages were exchanged with the relevant station, the division chief told the DDCI's executive assistant that the foreign service would still not provide the CIA with access to Curveball.[371] The division chief also sent an electronic mail—the text of which was prepared by the group chief—to the DDCI's executive assistant from the DO, which noted (in part):

> In response to your note, and in addition to your conversation with [the division chief], we have spoken with [the relevant] Station on Curve Ball:
>
> - We are not certain that we know where Curve Ball is...
>
> - Curve Ball has a history of being uncooperative. He is seeing the [handling foreign service soon] for more questions. The

[handling foreign service] cannot move the meeting up, we have asked.

- [The foreign service] ha[s] agreed to our using the information publicly, but do[es] not want it sourced back to them. Neither the [foreign service] nor, per [the foreign service's] assessment, Curve Ball, will refute their information if it is made public and is not attributed. Per Station, and us, we should be careful to conceal the origin of the information since if Curve Ball is exposed, the family he left in Iraq will be killed.

- The [handling foreign service] cannot vouch for the validity of the information. They are concerned that he may not have had direct access, and that much of what he reported was not secret. (per WINPAC, the information they could corroborate was in open source literature or was imagery of locations that may not have been restricted.)

- [A magazine says that the handling foreign service has] intelligence information on the mobile poison capabilities of the Iraqis, but that they will not share it.[372]

As a result, according to the division chief, the executive assistant told the division chief that the DDCI would speak to the analysts about the issue.[373] Although the executive assistant did not remember such a conversation, former DDCI McLaughlin told the Commission that he remembered talking to the WINPAC BW analyst responsible for Iraq about Curveball in January or February 2003.[374] Mr. McLaughlin said that he received strong assurances from the WINPAC analyst that the reporting was credible.[375]

By this time, there was less than a week left before Secretary Powell's February 5 speech, and the vetting process was going full-bore.[376] On February 3, 2003, the DDCI's executive assistant who had previously participated in meetings about Curveball sent a memorandum titled "[Foreign service] BW Source" to the division chief.[377] The memorandum, addressed to the division chief, read:

[T]his will confirm the DDCI's informal request to touch base w/ the [relevant] stations once more on the current status/whereabouts of the

> émigré who reported on the mobile BW labs. A great deal of effort is being expended to vet the intelligence that underlies SecState's upcoming UN presentation. Similarly, we want to take every precaution against unwelcome surprises that might emerge concerning the intel case; clearly, public statements by this émigré, press accounts of his reporting or credibility, or even direct press access to him would cause a number of potential concerns. The DDCI would be grateful for the [Chief of Station's] view on the immediate 'days-after' reaction in [the handling foreign service country] surrounding source of this key BW reporting.[378]

Preparations for the United Nations address culminated with Secretary Powell, Director of Central Intelligence George Tenet, and support staff going to New York City prior to the speech, which was to be delivered on February 5, 2003.[379] Until late in the night on February 4, Secretary Powell and Mr. Tenet continued to finalize aspects of the speech.[380]

According to the division chief, at about midnight on the night before the speech, he was called at home by Mr. Tenet. As the division chief recalls the conversation, Mr. Tenet asked whether the division chief had a contact number for another foreign intelligence service (not the service handling Curveball) so Mr. Tenet could get clearance to use information from a source of that service.[381] The division chief told the Commission that he took the opportunity to ask the DCI about the "[foreign service country] reporting" from the liaison service handling Curveball. Although he did not remember his exact words, the division chief says that he told Mr. Tenet something to the effect of "you know that the [foreign service] reporting has problems."[382] According to the division chief, Mr. Tenet replied with words to the effect of "yeah, yeah," and that he was "exhausted."[383] The division chief said that when he listened to the speech the next day, he was surprised that the information from Curveball had been included.[384]

In contrast to the division chief's version of events, Mr. Tenet stated that while he had in fact called the division chief on the night before Secretary Powell's speech to obtain the telephone number (albeit in the early evening as opposed to midnight) there had been no discussion of Curveball or his reporting.[385] Nor was there any indication that any information in the speech might be suspect. Mr. Tenet noted that it is inconceivable that he would have failed to raise with Secretary Powell any concerns about information in the speech about which Mr. Tenet had been made aware.[386] Moreover, he noted that he had

never been made aware of any concerns about Curveball until well after the cessation of major hostilities in Iraq.

In sum, there were concerns within the CIA—and most specifically the Directorate of Operations' division responsible for relations with the handling liaison service—about Curveball and his reporting. On several occasions, operations officers within this division expressed doubts about Curveball's credibility, the adequacy of his vetting, and the wisdom of relying so heavily on his information.

These views were expressed to CIA leadership, including at least the Associate Deputy Director for Operations and the executive assistant to the Deputy Director of Central Intelligence, and likely the Deputy Director for Operations and even—to some degree—mentioned to the Deputy Director of Central Intelligence himself. It would appear, however, that the criticism of Curveball grew less pointed when expressed in writing and as the issue rose through the CIA's chain of command. In other words, although we are confident that doubts about Curveball were expressed in one way or another to the Deputy Director for Central Intelligence, it is less clear whether those doubts were accompanied by the full, detailed panoply of information calling into question Curveball's reliability that was presented to more junior supervisors. We found no evidence that the doubts were conveyed by CIA leadership to policymakers in general—or Secretary Powell in particular.

As the discussion above illustrates, it is unclear precisely how and why these serious concerns about Curveball never reached Secretary Powell, despite his and his staff's vigorous efforts over several days in February 2003 to strip out every dubious piece of information in his proposed speech to the United Nations. It is clear, however, that serious concerns about Curveball were widely known at CIA in the months leading up to Secretary Powell's speech. In our view, the failure to convey these concerns to senior management, or, if such concerns were in fact raised to senior management, the failure to pass that information to Secretary Powell, represents a serious failure of management and leadership.

## Biological Warfare Finding 5

CIA management stood by Curveball's reporting long after post-war investigators in Iraq had established that he was lying about crucial issues.

A team of Intelligence Community analysts was dispatched to Iraq in early summer 2003 to investigate the details of Iraq's BW program. The analysts were, in particular, investigating two trailers that had been discovered by Coalition forces in April and May 2003, which at the time were thought to be the mobile BW facilities described by Curveball. As the summer wore on, however, at least one WINPAC analyst who had traveled to Iraq, as well as some DIA and INR analysts, became increasingly doubtful that the trailers were BW-related.[387]

The investigation also called into question other aspects of Curveball's reporting. According to one WINPAC BW analyst who was involved in the investigations, those individuals whom Curveball had identified as having been involved in the mobile BW program "all consistently denied knowing anything about this project."[388] Furthermore, none of the supposed project designers even knew who Curveball was, which contradicted Curveball's claim that he had been involved with those individuals in developing the mobile BW program.[389]

Additional research into Curveball's background in September 2003 revealed further discrepancies in his claims. For example, WINPAC analysts interviewed several of Curveball's supervisors at the government office where he had worked in Iraq. Curveball had claimed that this office had commenced a secret mobile BW program in 1995. But interviews with his supervisors, as well as friends and family members, confirmed that Curveball had been fired from his position in 1995.[390] Moreover, one of Curveball's family members noted that he had been out of Iraq for substantial periods between 1995 and 1999, times during which Curveball had claimed he had been working on BW projects.[391] In particular, Curveball claimed to have been present at the site of a BW production run when an accident occurred in 1998, killing 12 workers.[392] But Curveball was not even in Iraq at that time, according to information supplied by family members and later confirmed by travel records.[393]

By the end of October 2003, the WINPAC analysts conducting these investigations reported to the head of the ISG that they believed Curveball was a fabricator and that his reporting was "all false." But other WINPAC analysts, as well as CIA headquarters management, continued to support Curveball.[394] By January 2004, however, when CIA obtained travel records confirming that Curveball had been out of Iraq during the time he claimed to have been working on the mobile BW program, most analysts became convinced that Curveball had fabricated his reporting.[395]

Mr. Tenet was briefed on these findings on February 4, 2004. CIA management, however, was still reluctant to "go down the road" of admitting that Curveball was a fabricator.[396] According to WINPAC analysts, CIA's DI management was slow in retreating from Curveball's information because of political concerns about how this would look to the "Seventh Floor," the floor at Langley where CIA management have their offices, and to "downtown." CIA's Inspector General, in his post-war Inspection Report on WINPAC, concluded that "the process [of retreating from intelligence products derived from Curveball reporting] was drawn out principally due to three factors: (1) senior managers were determined to let the ISG in Iraq complete its work before correcting the mobile labs analysis; (2) the CIA was in the midst of trying to gain direct access to Curveball; and (3) WINPAC Biological and Chemical Group (BCG) management was struggling to reconcile strong differences among their BW analysts." Senior managers did not want to disavow Curveball only to find that his story stood up upon direct examination, or to find that "the ISG uncovered further evidence that would require additional adjustments to the story."[397]

Any remaining doubts, however, were removed when the CIA was finally given access to Curveball himself in March 2004. At that time, Curveball's inability to explain discrepancies in his reporting, his description of facilities and events, and his general demeanor led to the conclusion that his information was unreliable.[398] In particular, the CIA interviewers pressed Curveball to explain "discrepancies" between his aforementioned description of the site at Djerf al-Naddaf,[399] which he had alleged was a key locus for transportable BW, and satellite imagery of the site which showed marked differences in layout from that which Curveball described.[400] Specifically, there was a six foot high wall that would have precluded mobile BW trailers from moving into and out of the facility as Curveball had claimed. Curveball was completely

unable or unwilling to explain these discrepancies. The CIA concluded that Curveball had fabricated his reporting, and CIA and Defense HUMINT recalled all of it.[401]

The CIA also hypothesized that Curveball was motivated to provide fabricated information by his desire to gain permanent asylum.[402] Despite speculation that Curveball was encouraged to lie by the Iraqi National Congress (INC), the CIA's post-war investigations were unable to uncover any evidence that the INC or any other organization was directing Curveball to feed misleading information to the Intelligence Community.[403] Instead, the post-war investigations concluded that Curveball's reporting was not influenced by, controlled by, or connected to, the INC.[404]

In fact, over all, CIA's post-war investigations revealed that INC-related sources had a minimal impact on pre-war assessments.[405] The October 2002 NIE relied on reporting from two INC sources, both of whom were later deemed to be fabricators. One source—the INC source—provided fabricated reporting on the existence of mobile BW facilities in Iraq. The other source, whose information was provided in a text box in the NIE and sourced to a "defector," reported on the possible construction of a new nuclear facility in Iraq. The CIA concluded that this source was being "directed" by the INC to provide information to the U.S. Intelligence Community.[406] Reporting from these two INC sources had a "negligible" impact on the overall assessments, however.[407]

**Biological Warfare Finding 6**

In addition to the problems with Curveball, the Intelligence Community—and, particularly, the Defense HUMINT Service—failed to keep reporting from a known fabricator out of finished intelligence on Iraq's BW program in 2002 and 2003.

Another serious flaw affecting the Intelligence Community's pre-war assessments was its inability to keep reporting from a known fabricator out of finished intelligence. Specifically, the INC source, handled by DIA's Defense HUMINT Service, provided information on Iraqi mobile BW facilities that was initially thought to corroborate Curveball's reporting. The INC source was quickly deemed a fabricator in May 2002, however, and Defense

HUMINT issued a fabrication notice but did not recall the reporting on mobile BW facilities in Iraq. Despite the fabrication notice, reporting from the INC source regarding Iraqi mobile BW facilities started to be used again several months later in finished intelligence—eventually ending up in the October 2002 NIE and in Secretary Powell's February 2003 speech to the United Nations Security Council.[408]

This inability to prevent information known to be unreliable from making its way to policymakers was due to flawed processes at DIA's Defense HUMINT Service. Specifically, Defense HUMINT did not have in place a protocol to ensure that once a fabrication notice is issued, all previous reporting from that source is reissued with either a warning that the source might be a fabricator or a notice that the report is being recalled.[409] Though a fabrication notice was sent out, the reporting was never recalled, nor was the fabrication notice electronically attached to the original report. Analysts were thus forced to rely on their memory that a fabrication notice was issued for that source's reporting—a difficult task especially when they must be able to recognize that a particular report is from that source, which is not always obvious from the face of the report.[410]

Some steps have been taken to remedy this procedural problem. First, DIA's Defense HUMINT Service has now taken steps to ensure that reporting from a fabricating source is reissued with either the fabrication notice or recall notice electronically attached, rather than simply issuing a fabrication notice.[411] Second, the Director of the Central Intelligence Agency is currently working to establish Community-wide procedures to ensure that the information technology system links original reports, fabrication notices, and any subsequent recalls or corrections.[412] Unfortunately, however, the Intelligence Community continues to lack a mechanism that electronically tracks the sources for finished intelligence materials or briefings. This makes "walking back" intelligence papers or briefings to policymakers difficult, as there is no way to know which pieces relied upon what information.[413]

This failure properly to inform others that the INC source's reporting was not valid, however, was not merely a technical problem. DIA's Defense HUMINT Service also allowed Secretary Powell to use information from the INC source in his speech to the United Nations Security Council—even though a Defense HUMINT official was present at the coordination session at CIA held

before the speech. A Defense HUMINT Division Chief, who was aware of the fabrication notice on the INC source, attended both of the February 2 and 3 coordination meetings for the Powell speech yet failed to alert the Secretary that one of the sources the speech relied upon was a fabricator.[414] That Defense HUMINT official said that he was not aware that the information being discussed came from the INC source, indicating that Defense HUMINT had not adequately prepared itself for the meeting by reviewing the information Secretary Powell was considering using in the speech.[415]

## Conclusion

This section has revealed that Intelligence Community management was remiss in not taking action based on expressed concerns about Curveball's reliability. In retrospect, we conclude that the Intelligence Community's leadership should have more aggressively investigated Curveball's bona fides, rather than seeing the confidence of the analysts and the responsible liaison service as sufficient reason to dismiss the rival concerns of the operators and other liaison services. These leaders also should have pushed harder for access to Curveball—even at the cost of significant inter-liaison capital—given that the source's reporting was so critical to the judgment that Iraq was developing a mobile BW capability. After the NIE, CIA leadership should have paid closer heed to mounting concerns from the DO and, at the very least, informed senior policymakers about these concerns.

This said, the Community's failure to get the Iraq BW question right was not at its core the result of these managerial shortcomings. We need more and better human intelligence, but all such sources are inherently uncertain. Even if there had not been—as there was—affirmative reason to doubt Curveball's reporting, it is questionable whether such a broad conclusion (that Iraq had an active biological weapons production capability) should have been based almost entirely on the evidence of a single source to whom the U.S. Intelligence Community had never gained access. The Intelligence Community's failure to get the BW question right stemmed, first and foremost, from the strong prevailing assumptions about Iraq's intentions and behavior that led the Intelligence Community to conclude that Curveball's reporting was sufficient evidence to judge with "high confidence" that Iraq's offensive BW program was active and more advanced than it had been before the first Gulf War. The Intelligence Community placed too much weight on one source to whom the Community lacked

direct access—and did so without making clear to policymakers the extent of the judgment's reliance on this single, unvetted source.

## CHEMICAL WARFARE

### Chemical Warfare Summary Finding

The Intelligence Community erred in its 2002 NIE assessment of Iraq's alleged chemical warfare program. The Community's substantial overestimation of Iraq's chemical warfare program was due chiefly to flaws in analysis and the paucity of quality information collected.

In the fall of 2002, the Intelligence Community concluded with "high confidence" that Iraq had chemical warfare agents (CW), and further assessed that it had "begun renewed production of mustard, sarin, GF (cyclosarin), and VX."[416] Although the NIE cautioned that the Intelligence Community had "little specific information on Iraq's CW stockpile," it estimated that "Saddam probably [had] stocked at least 100 metric tons (MT) and possibly as much as 500 MT of CW agents."[417] The Community further judged that "much of" Iraq's CW stockpiles had been produced in the past year, and that Iraq had "rebuilt key portions of its CW infrastructure." [418]

After the war, the ISG concluded—contrary to the Intelligence Community's pre-war assessments—that Iraq had unilaterally destroyed its undeclared CW stockpile in 1991 and that there were no credible indications that Baghdad had resumed production of CW thereafter.[419] The ISG further found that Iraq had not regained its pre-1991 CW technical sophistication or production capabilities. Further, the ISG found that pre-war concerns of Iraqi plans to use CW if Coalition forces crossed certain defensive "red lines" were groundless; the "red lines" referred to conventional military planning only.[420] Finally, the ISG noted that the only CW it recovered were weapons manufactured before the first Gulf War, and that after 1991 only small, covert labs were maintained to research chemicals and poisons, primarily for intelligence operations.[421] The ISG did conclude, however, that "Saddam never abandoned his intentions to resume a CW effort when sanctions were lifted and conditions were judged favorable," and that Iraq's post-1995 infrastructure improvements "would have enhanced Iraq's ability to produce CW" if it chose to do so.[422]

The Intelligence Community's errors on Iraq's chemical weapons were, not unlike its errors on Iraq's nuclear and biological programs, heavily influenced by a single factor. In the case of chemical weapons, the factor was the Community's

over-reliance on dubious imagery indicators. At the same time, the Community's chemical weapons assessment was further led astray by breakdowns in communication between collectors and analysts and a paucity of supporting human and signals intelligence. All of this played a part in leading the Community to assess, incorrectly, that Iraq was stockpiling and producing chemical agents. And while a chemical warfare program is difficult to distinguish from a legitimate chemical infrastructure, the roots of the Community's failures reached well beyond such difficulties.

This section opens with a careful look at the Intelligence Community's assessments of Iraq's chemical program dating back to the end of the first Gulf War and reaching forward to the beginning of Operation Iraqi Freedom. The chapter then shifts to a detailed summary of the findings of the ISG regarding Iraq's alleged chemical warfare program. It then offers the Commission's findings from its in-depth study of the performance of the Intelligence Community on this subject, focusing especially on over-reliance on faultily-used imagery indicators and on the poverty of human and signals intelligence.

## The Intelligence Community's Pre-War Assessments

The Intelligence Community's assessment of Iraq's CW programs and capabilities remained relatively stable during the 1990s, judging that Iraq retained a modest capability to restart a chemical warfare program. The October 2002 NIE therefore marked a shift from previous assessments in that it concluded that Iraq had actually begun renewed production of chemical agents on a sizable scale.[423] This shift was based primarily on imagery, although analysts also saw support for their assessment in a small stream of human and signals intelligence on Iraq's CW capabilities. [424]

***Background.*** For more than ten years, the Intelligence Community believed that Iraq retained the capability to jumpstart its CW program. After Operation Desert Storm in 1991, the Community judged that Iraq retained CW munitions and CW-related materials; the Community based these judgments primarily on accounting discrepancies between Iraq's declarations about its chemical weapons program and what UNSCOM had actually discovered.[425] As with assessments of Iraq's nuclear and biological weapons programs, the conclusion that Iraq still had CW munitions was "reinforced by Iraq's continuing efforts to frustrate" United Nations inspectors.[426] Encapsulating this

line of reasoning, in 1995 the CIA judged that Iraq could "begin producing [chemical] agent in a matter of weeks after a decision to do so," based on the assessment that Iraq had "sequestered …at least some tens of metric tons" of CW precursors.[427] This assessment cautioned, however, that building Iraq's "CW program to its previous levels" would require two to three years.[428]

***Mid-1990s: Growing concern*.** The Intelligence Community's understanding of Iraq's CW program was altered with the defection in August 1995 of Hussein Kamil, the head of Iraq's Military Industrialization Committee and, as such, the head of Iraq's WMD programs. Among a host of damning revelations, Kamil released details previously unknown to the U.S. Intelligence Community about Iraq's pre-1991 production and use of VX nerve gas. More specifically, Iraq subsequently admitted that it had worked on in-flight mixing of binary CW weapons before the Gulf War, produced larger amounts of VX agent than previously admitted, and perfected long-term storage of a VX precursor. These admissions about Iraqi work on VX—a potent nerve agent and an advanced chemical weapon—all played an important role in shaping subsequent Intelligence Community assessments about Iraq's CW program.[429]

Two further revelations about the extent of Iraq's pre-1991 CW efforts also markedly influenced the Community's view of Iraq's CW programs. First, in June 1998, U.S. tests of warhead fragments from an Iraqi al-Hussein missile yielded traces of degraded VX.[430] This finding was noteworthy to Community analysts because it established beyond any doubt (in analysts' eyes) that Iraq, before 1991, had successfully weaponized VX—a technical advance that Iraq refused to admit in its United Nations declarations both before and after the United States became aware of the test results.[431]

Second, in July 1998, weapons inspectors found documents—now commonly known as the "Air Force Documents"—that detailed Iraqi CW use in the Iran-Iraq War.[432] This finding was significant because the documents indicated Iraq had expended far fewer CW munitions in the Iran-Iraq War than previously thought, thus suggesting that Iraq possessed more *unexpended* CW munitions than analysts believed. Analysts lent additional credence to the information because Iraqi officials refused to let inspectors actually keep the relevant document, which suggested to analysts that the documents were incriminating and important.[433] Though both of these revelations concerned Iraq's pre-1991 CW effort, analysts saw them as lending support to the assessment that Iraq was continuing its deliberate efforts to obscure elements of its CW capabilities.

By 1998, the Intelligence Community was continuing to assess that Baghdad retained "key elements of its CW program including personnel, production data, and hidden stocks of production equipment and precursor chemicals" and that "Iraq could begin limited CW agent production within weeks after United Nations sanctions are lifted and intrusive inspections cease."[434] The Community noted, however, that it lacked "reporting to confirm whether [CW] production [was] taking place."[435]

***2001-2002: Little change.*** The Community continued through 2001 to note that there was no evidence that Iraq had started large-scale production of CW.[436] Though analysts continued to believe that Iraq's *capability* to produce CW was increasing, primarily through the development of an indigenous chemical industry, and that Iraq might have engaged in small-scale production,[437] the Community continued to assess that Iraq had not restarted large-scale production.[438] Even after the terrorist attacks of September 11, 2001—when the Intelligence Community detected what it determined to be the dispersal of Iraqi military units in anticipation of U.S. military strikes[439]—the CIA found no evidence that the munitions Iraq was moving were CW-related.[440] And additional reporting during this time did not reveal whether certain suspect sites were actively engaged in CW weapons production—although it remained impossible to determine whether dual-use precursor chemicals were being produced for illicit purposes.[441]

With respect to possible CW stockpiles, as of 2002 the Community assessed that Iraq possessed between 10 and 100 metric tons of CW agent and that it might have had sufficient precursors to produce an additional 200 metric tons.[442] This estimated stockpile was smaller than the stockpiles Iraq possessed before the Gulf War, as an early 2002 Senior Executive Memorandum noted.[443] But according to a CIA analyst's mid-2002 briefing to senior officials, Iraq could restart CW production in a matter of days by using dual-use facilities and hidden precursors.[444] These assessments, however, did not go so far as to conclude that Iraq had restarted production or, relatedly, had sizable CW stockpiles.

***The October 2002 NIE.*** The October 2002 NIE reflected a shift in the Intelligence Community's judgment about Iraq's CW program in two ways: (1) the NIE assessed that Iraq had large stockpiles of CW; and (2) the NIE unequivocally stated that Iraq had restarted CW production.[445]

Regarding stockpiles, the NIE stated that "[a]lthough we have little specific information on Iraq's CW stockpile, Saddam probably has stocked at least 100 metric tons and possibly as much as 500 metric tons of CW agents—much of it added in the last year."[446] This judgment represented a significant increase in the Intelligence Community's estimate of the size of Iraq's CW stockpile.

This stockpile estimate rested primarily on Iraqi accounting discrepancies, Iraq's CW production capacity, estimates of Iraqi precursor stocks, and—at the upper limit (500 metric tons)—on practical considerations such as the size of pre-Gulf War stockpiles and Iraq's limited delivery options.[447] This calculation was also informed by the Intelligence Community's assessments of Iraqi military requirements, ammunition demand, and possible changes in Iraqi use doctrine.[448]

The lower end of this stockpile range (100 metric tons) was premised on the aforementioned 1999 estimate that Iraq possessed between 10 and 100 metric tons of CW agents and that Iraq "could" produce an additional 200 tons of agents "using unaccounted-for precursor chemicals."[449] This 1999 estimate was itself premised on previous Iraqi CW accounting irregularities.[450] The Community assessments of the range of Iraq's CW stockpile thus rested largely on what analysts estimated Iraq could do with unaccounted-for precursors and production capabilities.

In addition to assessing the size of the Iraqi CW stockpile, the NIE judged that "much" of the CW stockpile had been "added in the last year."[451] This latter assessment, in turn, rested on the NIE's second major CW conclusion: that Baghdad had "begun renewed production of mustard, sarin, GF (cyclosarin), and VX."

The NIE's judgment that Iraq had restarted CW production was based primarily on imagery intelligence.[452] As analysts subsequently explained, this imagery showed trucks transshipping materials to and from ammunition depots, including suspect CW sites, in Iraq. These transshipments began in March 2002 and continued until early 2003.[453] At approximately 11 sites, imagery analysts saw a number of "indicators" in the imagery that suggested to them that some of the trucks were possibly moving CW munitions; then, because imagery analysts observed evidence of numerous such shipments, CW analysts in turn assessed that Iraq was moving significant volumes of CW

munitions and therefore that Iraq had restarted CW production.[454] These indicators included the presence of "Samarra-type" trucks—a distinctive type of tanker truck—which were regularly associated with CW shipments in the late 1980s and during the Gulf War; atypical security patterns "associated with" the Special Republican Guard, which was believed to be responsible for protecting parts of Iraq's WMD programs; at least at one site, the grading of the topsoil, which likewise suggested to analysts deliberate concealment of suspect activity; and other indicators.[455]

Although the NIE's judgment that Iraq had restarted CW production was based primarily on imagery, that judgment was also supported by small streams of human and signals intelligence. The NIC subsequently explained in its Statement for the Record that this human intelligence reporting consisted of "a number of specific reports alleging that Iraq had resumed large-scale production of CW agents."[456] None of these reports was considered "highly reliable," however, and only six were deemed "moderately reliable." [457]

Of these reports, Community analysts identified to us several as having been most significant, although subsequent analysis of the reports revealed—in some cases—serious flaws in the reporting. The key reports were: one involving a foreign source in 1999 who reported that two Iraqi companies were involved in the production of nerve gas;[458] reporting concerning a factory for the production of castor oil that could be used to make "sarin";[459] information from an Iraqi defector, who claimed to be an expert in VX production, describing the production of "tons" of nerve agents in mobile labs;[460] reporting from a source with "good but historical access" asserting that, as of 1998, mustard and binary chemical agents were being produced in Iraq;[461] a source who reported that Iraq was producing a binary compound and mustard as of fall 2001;[462] and reporting on the production of CW at dual-use facilities.[463]

Finally, a liaison service reported in September 2002 that a senior Iraqi official had indicated that Iraq was producing and stockpiling chemical weapons.[464] Although this report was distributed to a very small group of senior officials prior to the publication of the NIE—including to the NIE's principal author—it was not made available to most analysts.[465] In any event, as described below, the senior Iraqi official later denied having made such statements.

In addition to these imagery indicators of transshipment activity and human intelligence, the NIE also drew upon a handful of additional pieces of information—

based largely on other Intelligence Community reporting—to support the assessment that Baghdad had restarted CW production. This information suggested suspect activity at dual-use sites and included: indications that Iraq was expanding its indigenous chemical industry in ways that were deemed unlikely to be for civilian purposes, specifically by increasing the indigenous production capacity for chlorine—despite the fact that Iraq's civilian chlorine needs were met through United Nations-permitted imports;[466] the "management" of key chemical facilities by "previously identified CW personnel";[467] attempted procurement of nuclear, biological, and chemical weapons defensive materials; and the attempted procurement of dual-use materials associated with CW.[468] Although the NIE noted that the Intelligence Community could not "link definitively Iraq's procurement of CW precursors, technology, and specialized equipment from foreign sources directly" to its CW program,[469] it nevertheless assessed that "Iraq's procurements have contributed to the rebuilding of dual-use facilities that probably are adding to Iraq's overall CW agent capability."[470] In drawing this conclusion, the NIE drew particular attention to Iraq's attempts to obtain necessary precursors for nerve agents.[471]

Finally, reporting on other aspects of Iraq's unconventional weapons programs also influenced some analysts' CW-related conclusions. Specifically, reporting on the existence of Iraqi mobile BW production facilities—namely, reports from Curveball—buttressed some analysts' certainty in their CW judgments. As one CIA analyst put it, "much of the CW confidence [in the pre-war assessments] was built on the BW confidence."[472] In other words, although some CW analysts at times questioned the existence of significant Iraqi CW stockpiles, the reports that Iraq had a hidden, mobile BW program pushed the analysts "in the other direction" and helped convince them of their ultimate conclusion: that Iraq was hiding a CW program.[473]

***Post-October 2002 NIE reports.*** In November 2002, the NIC published a Memorandum to Holders of the October NIE entitled *Iraq's Chemical Warfare Capabilities: Potential for Dusty and Fourth-Generation Agents*.[474] The Memorandum warned that Iraq might possess dusty agent[475] and that it had the technical expertise to develop fourth-generation agents[476] that could be extremely lethal. Identifying the "Key Intelligence Gaps" on Iraq's CW program, the Memorandum observed that although the Intelligence Community "assess[ed]" that Iraq was producing blister and nerve agents, the Intelligence Community had not "identified key production facilities" and did "not know the extent of indigenous production or procurement of CW precursors."[477]

But just as the NIE had cautioned that the Intelligence Community had "little specific information on Iraq's CW stockpile," the Memorandum stated that the Intelligence Community had "almost no information on the size, composition, or location of Iraq's CW stockpile."[478] In a separate NIE published in January 2003, however, the Community reiterated its estimate that Iraq "ha[d] 100 to 500 metric tons of weaponized bulk agent."[479]

In December 2002, CIA's WINPAC published a coordinated Intelligence Community paper that reiterated its belief that "Iraq retain[ed] an offensive CW program," but it did not specifically describe the extent of any CW stockpiles.[480] In addition, the CIA reported the Intelligence Community had "low confidence" in its ability to monitor the Iraqi CW program due to "stringent operational security" and "successful denial and deception practices."[481]

## Post-War Findings of the Iraq Survey Group

The Iraq Survey Group's findings undermined both the Intelligence Community's assessments about Iraq's pre-war CW program and, indeed, the very fundamental assumptions upon which those assessments were based. The ISG concluded—contrary to the Intelligence Community's pre-war assessments—that Iraq had actually unilaterally destroyed its undeclared CW stockpile in 1991 and that there were no credible indications that Baghdad resumed production of CW thereafter.[482] Iraq had not regained its pre-1991 CW technical sophistication or production capabilities prior to the war. Further, pre-war concerns of Iraqi plans to use CW if Coalition forces crossed certain defensive "red lines" were groundless; the "red lines" referred to conventional military planning only.[483] Finally, the only CW the Iraq Survey Group recovered were weapons manufactured before the first Gulf War; the ISG concluded that, after 1991, Iraq maintained only small, covert labs to research chemicals and poisons, primarily for intelligence operations.[484] However, "Saddam never abandoned his intentions to resume a CW effort when sanctions were lifted and conditions were judged favorable," and Iraq's post-1996 infrastructure improvements "would have enhanced Iraq's ability to produce CW" if it had chosen to do so.[485]

Despite having "expended considerable time and expertise searching for extant CW munitions,"—the vaunted stockpiles—the ISG concluded with "high confidence that there are no CW present in the Iraqi inventory."[486] The ISG specifically investigated 11 sites that were associated with sus-

pected CW transshipment activity, conducting an in-depth inspection of two of the sites, which were "assessed prior to war to have the strongest indicators of CW movement."[487] Neither of these sites revealed any CW munitions.[488] Further, the ISG's "review of documents, interviews, intelligence reporting, and site exploitations revealed alternate, plausible explanations" for pre-war transshipment activity that the Intelligence Community judged to have been CW-related.[489]

Regarding Iraq's dual-use chemical infrastructure and personnel, the Iraq Survey Group found no direct link to a CW program. Instead, investigators found that, though Iraq's chemical industry began expanding after 1996, in part due to the influx of funds and resources from the Oil-for-Food program, the country's CW capabilities remained less than those which existed prior to the Gulf War.[490] The ISG also interviewed 30 of the approximately 60 "key" Iraqi CW scientists, all of whom denied having been involved in any CW activity since 1990 and the vast majority of whom denied having any knowledge of any CW activity occurring.[491]

The ISG also cited a number of reasons why Iraq's expansion of its chlorine capacity was not, contrary to the NIE's assessment, capable of being diverted to CW production.[492] Specifically, Iraq experienced a "country-wide chlorine shortage," and Iraq's chlorine plants "suffered from corroded condensers and were only able to produce aqueous chlorine."[493] Further, "[t]echnical problems and poor maintenance of aging equipment throughout the 1990s resulted in many chemical plants, including ethylene and chlorine production plants, operating at less than half capacity despite the improvements to the chemical industry."[494]

In sum, the Iraq Survey Group found no direct link between Iraq's dual-use infrastructure and its CW program. However, "concerns" about some aspects of the infrastructure[495] arising out of "an extensive, yet fragmentary and circumstantial body of evidence" suggested Saddam intended to maintain his CW capabilities by preserving CW-related assets and expertise.[496]

Regarding Iraqi decisionmaking about its CW program after 1991, the ISG concluded that, in the aftermath of the Gulf War, "Iraq initially chose not to fully declare its CW" in anticipation that inspections would be short-lived and ineffective. This position changed after a particularly invasive search in late June 1991, after which Iraq destroyed its hidden CW and precursors

while retaining some documents and dual-use equipment. Iraq kept these latter items for the next five years, but did not renew its CW efforts out of fear that such a move would imperil its effort to have sanctions lifted. In August 1995, however, after the defection of Hussein Kamil, Saddam relented and revealed to inspectors extensive VX research and other, more advanced, technologies.[497]

Overall, although the vast majority of CW munitions had been destroyed, the Iraq Survey Group recognized that questions remained relating to the disposition of hundreds of pre-1991 CW munitions.[498] Still, given that, of the dozens of CW munitions that the ISG discovered, all had been manufactured before 1991, the Intelligence Community's 2002 assessments that Iraq had restarted its CW program turned out to have been seriously off the mark.[499]

Finally, on two ancillary issues the ISG found little or no evidence to support indications of Iraqi CW efforts. First, with respect to a "red line" defense of Baghdad, the ISG found no information that such a defense—which amounted to a multi-ring conventional defense of the city—called for the use of CW.[500] According to a senior Iraqi military officer, the "red line" was simply the line at which Iraqi military units would no longer retreat.[501] At the same time, both generals and high-level defense officials believed that a plan for CW use existed, even though they themselves knew nothing about it.[502]

Second, with respect to CW work by the Iraqi Intelligence Service, there was "no evidence" of CW production in clandestine labs, other than the Service's laboratory effort to develop substances to kill or incapacitate targeted individuals.[503]

## Analysis of the Intelligence Community's Pre-War Assessments

As the foregoing comparison illustrates, the Intelligence Community's pre-war assessments of Iraq's CW program were well off the mark. Iraq did not have CW stockpiles; it was not producing CW agent; and its chemical infrastructure was in far worse shape than the Intelligence Community believed. It is a daunting task in any circumstance to distinguish a normal chemical infrastructure and conventional military establishment on the one hand from a chemical warfare program on the other. But the Community made more difficult the challenges of identifying a CW program in Iraq by latching on to

ambiguous imagery indicators and by failing to collect enough good intelligence to keep analytic judgments tethered to reality.

There are several reasons for the significant gap between the Intelligence Community's pre-war assessment of Iraq's CW program and the Iraq Survey Group's findings. Chief among these was the over-reliance on a single, ambiguous source (the Samarra-type tanker trucks) to support multiple judgments. Less central, although still significant, were the failure of analysts to understand fully the limitations of technical collection; the lack of quality human intelligence sources; the lack of quality signals intelligence; and, on a broader plane, the universal difficulty of establishing the existence of a CW program in light of the prevalence of dual-use technology.

**Chemical Warfare Finding 1**

The Intelligence Community relied too heavily on ambiguous imagery indicators identified at suspect Iraqi facilities for its broad judgment about Iraq's chemical warfare program. In particular, analysts leaned too much on the judgment that the presence of "Samarra-type" trucks (and related activity) indicated that Iraq had resumed its chemical weapons program.

As noted, the pre-war assessment that Iraq had restarted CW production relied primarily on CW analysts' assessments of imagery intelligence.[504] This imagery showed trucks transshipping materials to and from ammunition depots, including suspect CW-sites, in Iraq.[505] In the late spring of 2002, analysts started to believe that these shipments involved CW munitions.[506] This belief was based on the aforementioned "indicators" seen on the imagery—that is, activity and circumstances surrounding the shipments that were thought to be indicative of CW activity. The most important of these indicators was the presence of "Samarra-type" trucks—a distinctive type of tanker truck—which had been regularly associated with Iraqi CW shipments in the late 1980s and during the Gulf War.[507] Based on the assessment that the presence of these Samarra-type trucks (in combination with the other indicators) suggested CW shipments, CW analysts then judged that the frequency of such transshipments pointed to the assessment that "CW was already deployed with the military logistics chain," which, in turn, indicated to these analysts that Iraq had added to its CW stockpile in the last year. That assessment, in turn, indicated to analysts that Iraq had restarted CW production.

In short, the key pre-war assessments about Iraq's CW program—that Iraq was actively producing CW and had increased its stockpile of CW—rested on the following evidence and associated reasoning:

- Imagery revealed the presence of Samarra-type trucks at suspect weapons sites;
- The presence of Samarra-type trucks indicated CW activity;
- The scale of the Samarra-type trucks' involvement demonstrated Iraq had already deployed CW with their forces; and
- For CW to be deployed with Iraqi forces, Iraq had to have restarted CW production within the past year—the period during which analysts had seen Samarra-type trucks.

As this logic train illustrates, the final conclusion regarding restarted CW production was, therefore, fundamentally grounded on the single assessment that the Samarra-type trucks seen on imagery were in fact CW-related.[508] This assessment, however, proved to be incorrect—thereby eliminating the crucial pillar on which the Community's judgment about Iraq's CW program rested.

Post-war investigation revealed how the Intelligence Community ran astray. After the war, NGA "reassessed" the imagery from one of the sites thought to bear the strongest indications of CW activity—the Al Musayyib Barracks—by incorporating information from ISG inspections and debriefings of key personnel.[509] Contrary to pre-war assessments, NGA concluded that the activity represented "conventional maintenance and logistical activity rather than chemical weapons."[510] NGA analysts drew this conclusion in part after reexamining imagery and in part on ISG debriefs of former commanders of the Al Musayyib site.[511]

More detailed analysis of other imagery intelligence—in particular, surface grading—also revealed the absence of a clear link to CW.[512] NGA assessed that grading could be associated with innocuous, routine activities.[513] The rationales behind that assessment are discussed in the classified report.

The story is much the same with respect to pre-war assessments of other imagery evidence regarding certain security patterns.[514] Post-war analysis by

NGA could not confirm pre-war assessments that these security patterns were indicative of Special Republican Guard activity associated with security at CW-related sites. Indeed, at least one human source debriefed after the war said the security activity in question was not related to the Special Republican Guard and that it was actually related to the performance of miscellaneous jobs associated with the ammunition depot.[515]

Finally, post-war debriefings suggested that other CW-related imagery evidence was also innocuous, although this suggestion was neither definitively confirmed nor refuted by the imagery reassessment.[516] And NGA notes that it is generally not possible to determine from imagery whether some activities, such as certain safety measures, are intended to support the training of offensive or defensive chemical warfare troops. And NGA has noted that imagery, when used alone, may not definitely determine the intended purpose of an adversary's activity.

The Community's over-reliance on ambiguous imagery indicators thus played a pivotal role in its ultimate misjudgment that Iraq had restarted CW production and had increased its CW stockpiles. In our view analysts relied too heavily on the presence of Samarra tanker trucks—backed by other, even more ambiguous imagery indicators—to support multiple, interdependent, and wide-ranging judgments about Iraq's chemical warfare program. And the Community did so despite the truism about which NGA itself has cautioned: imagery alone can neither prove nor disprove a CW association.[517]

Building one assessment upon another in this fashion—without carrying forward the uncertainty of each "layer" of assessment—results in a false impression of certainty for analysts' ultimate judgment. We believe, therefore, that at a minimum analysts must communicate the uncertainty of their judgments, and the degree to which they rely on narrow assessments about specific indicators. Moreover, avoiding the pitfalls of such layering requires careful consideration of alternative hypotheses, such as, in this case, the possibility that the shipments involved conventional weapons and that the trucks were for water supply or fire suppression.

We do not discount the fact that analysts must sometimes focus on seemingly mundane indicators. But at the same time analysts must always recognize, and communicate to decisionmakers, the tenuous quality of their reasoning.

**Chemical Warfare Finding 2**

Analysts failed to understand, and collectors did not adequately communicate, the limitations of imagery collection. Specifically, analysts did not realize that the observed increase in activity at suspected Iraqi chemical facilities may have been the result of increased imagery collection rather than an increase in Iraqi activity.

Analytical flaws in assessing the significance of the imagery indicators were not the only factors leading to the misassessment of the imagery intelligence. In addition, analysts may have misperceived the significance of the imagery on Iraq's supposed CW program because they did not fully understand—and the collectors did not fully explain—the scope and nature of imagery collection against the target. Indeed, we cannot rule out the possibility that the analytic judgment that Iraq had added to its CW stockpile in the preceding year rested, at least in part, on a simple increase in *collection* and reporting rather than any rise in Iraqi *activity.*

Pre-war, analysts relied upon imagery to detect transshipment activity at suspected CW sites, and beginning in March 2002, analysts believed that they were seeing an "increase" in such activity.[518] In reality, however, the "increase" in transshipment activity that analysts saw starting in March 2002 may have been due, at least in part, to an increased volume of imagery *collected* by U.S. satellites rather than to any increased activity by the Iraqis. To only somewhat oversimplify the matter, it wasn't that the Iraqis were using Samarra trucks more often in 2002—it was that in 2002 the United States was taking more pictures of places where the Samarra trucks were being used. And this failure to distinguish between *actual* increased activity at suspect CW sites and the *appearance* of increased activity due to increased imaging likely contributed to the mistaken assessment that Iraq was ramping up CW production in 2002.

This error sprung from the fact that not all Community analysts were fully cognizant of a major change in NGA collection that occurred in the spring of

2002.[519] Until 2000, imagery collection on Iraq had been oriented primarily toward supporting military operations associated with the no-fly zones.[520] But in 2001 and 2002, imagery collection against Iraq WMD more than doubled, prompted by recommendations that more attention be given to the target.[521] Most significantly, the United States began "expanded imagery collection over Baghdad [and] suspect WMD sites" in March 2002—not coincidentally the same time that analysts began to "see" new activity they associated with CW transshipments.[522]

Thus, in drawing their conclusions about the state of Iraq's CW production based on increased transshipment activity, analysts did not realize the necessity of distinguishing between the "new" activity they saw, on the one hand, at sites that had been previously imaged on a regular basis (*e.g.*, suspect WMD sites) and, on the other, at sites that had not been previously imaged on a regular basis (*e.g.*, ammunition depots that had not been previously associated with WMD).[523] Whereas increased activity at the former could be attributed to changes in Iraqi behavior (since the United States had been photographing the sites prior to March 2002), the same could not be said for the latter category (since there was no "baseline" of activity with which to compare levels of activity seen from March 2002 on).[524]

This problem extended to one of the sites that was key to analysts' conclusions about Iraqi CW production—the Al Musayyib Barracks. According to NGA, Al Musayyib had not been regularly imaged prior to the March 2002 imaging blitz because it had not been previously associated with Iraq's chemical or biological weapons programs.[525] Unaware of this important fact, analysts confidently assessed that the Iraqis had expanded transshipment activity at Al Musayyib, as well as other sites, when they began to see more images of Samarra-type truck activity. In short, analysts attributed what they saw to nefarious Iraqi activity when it could just as easily have been attributed to changes in U.S. collection priorities. In our view, this failure is the direct result of poor communication between analysts and collectors about a crucial change in the scope and nature of collection against a vital target.

### Chemical Warfare Finding 3

Human intelligence collection against Iraq's chemical activities was paltry, and much has subsequently proved problematic.

Analysts were not alone in contributing to a flawed assessment about a resuscitant Iraqi CW program. Collectors, too, were involved—but mostly by their conspicuous absence. Against Iraq's program, Intelligence Community collectors failed to produce much either in terms of quantity or, worse, validity, thus making analysts' jobs considerably harder, and influencing analysts to place more weight on the imagery intelligence than it could logically bear.

A small quantity of human source reporting supplied the bulk of the narrow band of intelligence supplementing the imagery intelligence. And the most striking fact about reporting on Iraq's CW program was, as with other elements of Iraq's weapons programs, its paucity. Yet there was more than just scarcity, for—as with sources on Iraq's supposed BW program—many of the CW sources subsequently proved unreliable. Indeed, perhaps even more so that with the BW sources, Community analysts should have been more cautious about using the CW sources' reporting, as much of it was deeply problematic on its face. In our view, prior to the war, analysts should have viewed at least three human sources more skeptically than they did. In addition, post-war, questions about the veracity of two other human sources have also surfaced.

### Sources Whose Reliability Should Have Been Questioned Prior to the NIE

One source, an Iraqi defector who had worked as a chemist in Iraq through the 1990s, reported information that made its way into the NIE.[526] This happened even though, from the start of his relations with the U.S. Intelligence Community, the Community had deemed aspects of his reporting not credible. His information survived, despite these indications that he might be an unreliable source, because analysts simply rejected those parts of his reporting that seemed implausible and accepted the rest. For example, he claimed that Iraq had produced a combined nuclear-biological-chemical weapon, a claim that analysts recognized at the time as absurd.[527] Analysts were also skeptical of his claim that Iraq had begun producing "tons" of VX in 1998 in mobile labs, because such labs would be very unlikely to have the capacity to produce such large amounts of agent.[528]

Despite these highly suspect claims, analysts credited the source's reporting that Iraq had successfully stabilized VX.[529] As one analyst reviewing his reporting after the war said of it, "half seems credible and half seems preposterous."[530] Yet at the time the NIE was written, with substantial skepticism about the validity of much of his information, analysts nevertheless judged his

reporting to be "moderately credible."[531] In our view, given that important parts of his information were simply unbelievable and recognized as such by analysts, the Community should have approached him and his intelligence with more caution—and certainly should have been more skeptical about using selections from his reporting in the authoritative NIE.

Indeed, analytic skepticism about the source's claims was later confirmed by revelations about his operational history, revelations that led to the Intelligence Community deeming him a fabricator and recalling his reporting, although not all of his reporting was recalled until almost one year after the war started.[532] He had initially come to the CIA's attention via a foreign intelligence service, which asked for the CIA's assistance after he had approached them.[533] In March 2003, however, the CIA terminated contact with him, after administering an examination in February 2003 during which he was deceptive. CIA had also learned that he had—before approaching this foreign service—already been debriefed by two other intelligence services, indicating that he was something of an "information peddler."[534] Moreover, one of these two services had concluded that although his pre-1991 information was credible, his post-1991 information was both not credible and possibly "directed" by a hostile service.[535] CIA started to recall his reporting in March 2003, but did not recall all of it until February 2004.[536]

Another source, who was described as a contact with "good but historical access" but lacking "an established reporting record," reported in July 2002 that, as of 1998, Iraq was producing mustard and binary chemical agents.[537] At the same time, he also reported on a "wide range of disparate subjects," including on Iraq's missile program and nuclear and biological weapons programs.[538] Such broad access, on its face, was inconsistent with what analysts understood to be Iraq's well-known tendency towards compartmentation of sensitive weapons programs.[539] Yet because of the Community's *own* compartmentation—working-level analysts saw reporting on *their* area but not on others—they did not realize at the time that one source was reporting on a range of topics for which he was unlikely to have access.[540] Moreover, although analysts did not know it at the time, the source obtained his information from unknown and undescribed sub-sources.[541]

Finally, a third source provided information that was technically implausible on its face. His reporting claimed that Iraq had constructed a factory for the production of castor oil that could be used for the production of sarin.[542]

Although castor beans can be used to make ricin, not sarin—a fact that analysts readily understood—analysts did not discount the information.[543] Instead, they interpreted it in a way that would cure the technical difficulty, reading it as indicating that the facility could produce *both* sarin and ricin.[544] But in so doing, analysts were consciously compensating for technical errors in the reporting. This exercise of "compensating for errors" in the reporting may well be appropriate in some instances, as when the source of the report may not have the competence to report accurately on a given technical subject.[545] But such speculative interpretation must be carefully balanced with a healthy skepticism, especially when, as in the case of Iraq's CW program, the intelligence as a whole on the subject is weak and analysts' underlying assumptions are strong. An untethered "compensating for errors" runs the risk of skewing the analysis in the direction of those assumptions, as, unfortunately, happened here.

### Sources Whose Reliability Has Been Questioned After the NIE

The remaining human intelligence sources relied upon to support the conclusion that Iraq had restarted CW production, while not so problematic on the surface as the sources just described, have become questionable in hindsight.

One liaison source, details about whom cannot be disclosed at this level of classification, reported on production and stocks of chemical and biological weapons and agents, based on what he learned from others in his circle of high-level contacts in Baghdad.[546] While this source provided general information on Iraq's CW program, he provided few details. In our view, the bottom line on this source was that he had no personal knowledge of CW and provided few details of CW capabilities—factors that should have prompted caution in using his reporting as significant evidence that the Iraqis had restarted CW production.

One other human source—while unlikely to have affected the NIE because his reporting dissemination was so limited—was also called into question after the start of the war. In September 2002, a liaison service reported that a senior Iraqi official had said that Iraq was producing and stockpiling chemical weapons.[547] The source of the information claimed to have spoken with this senior official on this topic. CIA was able to confirm at the time of the report that the senior official had been in contact with the source. After the start of the war, however, when CIA officers interviewed the senior official, he denied ever making such comments. Although the CIA's Directorate of Operations

requested liaison assistance in clarifying this issue, as of March 2005 the issue remained unresolved.

### Chemical Warfare Finding 4

Signals intelligence collection against Iraq's chemical activities was minimal, and much was of questionable value.

Signals intelligence provided only minimal information regarding Iraq's chemical weapons programs and, due to the nature of the sources, what was provided was of dubious quality and therefore of questionable value. Although the Intelligence Community originally cited more than two dozen such intelligence reports as supporting the proposition that Iraq was attempting to reconstitute its chemical weapons program, a subsequent review revealed that only a handful of the reports provided any usable information for analysis. It is not readily apparent what caused this discrepancy, but we think it plain that the Intelligence Community should have conducted a far more careful and thoughtful pre-war analysis of this signals intelligence information and treated it with greater skepticism.

## Conclusion

Similar to its assessments about Iraq's nuclear and biological efforts, the Intelligence Community's mistaken assessments about Iraq's chemical weapons program can be traced in large part to a single point of failure—the Community's over-reliance on ambiguous imagery indicators. But the Community's bottom line on Iraq's chemical weapons capabilities was further influenced by a breakdown in communication between imagery collectors and analysts; a basic paucity of quality intelligence, particularly quality signals intelligence; and the fact that much of the human and signals intelligence that was collected was bad.

It is, however, understandable that analysts assessed—as they did throughout the 1990s—that Iraq retained a chemical warfare capability. Iraq's pre-Gulf War chemical weapons stockpile was large and relatively sophisticated. Nor did Saddam's uncooperative and secretive behavior after the war encourage confidence that he had converted from the CW path. The Community's failure on CW was therefore not in thinking that Iraq had such a capability—that was, in many ways, the only sensible conclusion, given the evidence. Rather,

analysts erred in their assessment—based largely on ambiguous imagery indicators that could not logically support the judgment—that Iraq had in fact resumed producing and stockpiling significant quantities of CW.

## DELIVERY SYSTEMS

### Delivery Systems Summary Finding 1

The Intelligence Community incorrectly assessed that Iraq was developing unmanned aerial vehicles for the purpose of delivering biological weapons strikes against U.S. interests.

### Delivery Systems Summary Finding 2

The Intelligence Community correctly judged that Iraq was developing ballistic missile systems that violated United Nations strictures, but was incorrect in assessing that Iraq had preserved its Scud missile force.

The Intelligence Community assessed in the October 2002 NIE that Iraq was developing small Unmanned Aerial Vehicles (UAVs) capable of autonomous flight, which most agencies assessed were "probably" intended to deliver biological warfare agents.[548] The Intelligence Community also judged that these UAVs could threaten the U.S. homeland.[549] This latter assessment was based on an Iraqi attempt to procure commercially available civilian U.S. mapping software for its UAVs. That attempted procurement, the Intelligence Community assessed, "strongly suggest[ed] that Iraq [was] investigating the use of these UAVs for missions targeting the United States."[550]

By January 2003, however, the Intelligence Community had pulled back from its view that Iraq intended to target the United States.[551] This re-assessment reflected a belief among CIA analysts that the Iraqi attempt to procure U.S. mapping software may have been inadvertent.[552] As a result, the Intelligence Community assessed in January 2003 that while the mapping software could provide the *capability* to target the United States, the purchasing attempt did not necessarily indicate an intent to do so.[553] By early March 2003, CIA had further retreated from the view that the purchase of the mapping software evidenced an intent to target the United States and, in early March 2003, on the eve of the invasion of Iraq, CIA advised senior policymakers that it was an open question whether the attempted software procurement evinced the intent to target the United States at all.[554]

Following its exhaustive investigation in Iraq, the Iraq Survey Group concluded that Iraq had indeed been developing small UAVs, but found no evidence that the UAVs had been designed to deliver biological agent.[555] Instead, the ISG concluded that Iraq had been developing and had flight tested a small, autonomous UAV intended for use as a reconnaissance platform,[556] and had developed a prototype for another small UAV for use in electronic warfare missions.[557] Although both UAVs had the range, payload, guidance, and autonomy necessary to deliver a biological agent, the ISG found no evidence that Iraq intended to use them in such a way.[558] With respect to the mapping software, Iraqi officials told ISG investigators that the software in question had been included as part of a package deal with autopilots they had purchased for the UAVs; the Iraqis, the ISG judged, had not actually intended to buy the mapping software.[559]

The October 2002 NIE had also examined whether Iraq was deploying missiles capable of reaching beyond the 150 kilometer limit imposed by the United Nations. The NIE assessed that Iraq was deploying two types of short-range ballistic missiles capable of flying beyond the United Nations-authorized range limit.[560] The NIE also assessed, based largely on Iraqi accounting discrepancies and incomplete records and record keeping, that Iraq retained a covert force of up to a few dozen Scud-variant missiles in defiance of United Nations resolutions.[561] The ISG concluded—consistent with this assessment—that Iraq had been developing and deploying ballistic missiles that exceeded United Nations restrictions, although the ISG also found, contrary to pre-war assessments, that Iraq had not retained Scud or Scud-variant missiles after 1991.[562]

The Intelligence Community's assessments of Iraq's delivery systems developments offered both a bright and a dark spot on its Iraq record. While far from perfect (which can never be reasonably expected in intelligence work), the Community's judgments about the progress of Iraq's ballistic missile programs were substantively accurate. As the ISG discovered, the Iraqis were indeed violating United Nations strictures by working on missiles that exceeded the 150 kilometer range limit. But on the issue of whether Iraq was developing UAVs to deliver biological agent against U.S. targets—including the U.S. homeland—the Community erred, once again attributing more to spotty intelligence than that information could bear.

This section describes the Community's analysis of Iraq's work on delivery systems between the first Gulf War and Operation Iraqi Freedom, as well as the ISG's findings concerning the same. The Commission then offers its findings based on a thorough investigation into the Community's efforts on Iraqi delivery systems, concentrating particularly on the analytical flaws apparent from the Community's products on the uses of Iraqi UAVs.

## The Intelligence Community's Pre-War Assessments

As with other aspects of Iraq's WMD programs, the Intelligence Community's assessment of Iraq's delivery systems evolved over the course of many years and was heavily influenced by Iraq's past actions and intransigence.

***Background.*** Before the Gulf War Iraq had been in the early stages of a project to convert the MiG-21 jet aircraft into UAVs for BW delivery.[563] In addition, Iraq had experimented in 1990 on a BW spray system, designed to be used with the MiG-21 UAV.[564] Iraq admitted to this program in 1995, after the defection of Hussein Kamil.[565] Subsequent UNSCOM inspections discovered video showing the spray-system experiments.[566] Also, analysts in the early 1990s had observed continued activity at Salman Pak—Iraq's primary BW research and development facility prior to the Gulf War—where, UNSCOM reported, work continued on modified commercial crop sprayers for BW delivery and the presence of UAV program personnel.[567] Iraq claimed that, because of the war, it had abandoned the MiG-21 UAV project after conducting only one experiment in 1991, but UNSCOM inspections could not confirm this claim.[568] In the mid-1990s Iraq also began testing another modified jet aircraft, the L-29, as a UAV, that analysts believed was a follow-on to the converted MiG-21 program.[569]

These discoveries also cast new light, in analysts' minds, on UNSCOM's earlier discovery of 11 small-to-medium sized UAV drones at the Salman Pak compound in 1991.[570] Although Iraq denied having developed these UAVs for BW delivery, Iraq's later admission—after an initial denial—that the MiG-21 program was for the purpose of delivering biological agents led analysts to believe, given Iraqi deception, that Iraq's small UAVs had a similar purpose.[571] Analysts also focused on Iraqi admissions—in their 1996 declaration to the United Nations—that, in the late 1980s, senior Iraqi officials had met to discuss the feasibility of using small UAVs as BW delivery vehicles.[572]

This history, along with evidence that Iraq had flight-tested small and medium-sized UAVs, led most Intelligence Community analysts to conclude consistently from the late 1990s through 2002 that Iraq was maintaining its UAV program for BW and CW delivery.[573] Briefings and written products to senior policymakers in mid-2002 reflected this assessment.[574] As with the other elements of Iraq's purported weapons programs, however, intelligence on UAVs in the years preceding 2002 was partial and ambiguous. While it was clear that Iraq did have a UAV program, the key question—whether that program was meant to be a delivery system—remained unanswered. Therefore, analysts' judgments again depended heavily upon assumptions based on Iraq's earlier behavior and Community views about Iraq's sophisticated denial and deception activities.[575]

With respect to ballistic missiles, the Intelligence Community judged in 1992 that Iraq's ballistic missile programs were more advanced than the Community had assessed before the Gulf War.[576] Iraq was further along in its production capability for Scud and Scud-derivative missiles and had produced more components indigenously than the Intelligence Community had assessed before the Gulf War.[577] By 1995, the Intelligence Community judged that Iraq was developing liquid-propellant missiles with an expected range of about 150 kilometers.[578] In 1998, the Community assessed that these missiles, named the al-Samoud, were capable of flying farther than the 150 kilometer limit imposed by the United Nations and that Iraq was also developing solid-propellant missiles.[579] By early 2002, the Intelligence Community judged that Iraq probably still retained a small force of Scud missiles and that both its liquid-propellant and solid-propellant missiles were capable of flying over 150 kilometers.[580]

***October 2002 NIE.*** The October 2002 NIE judged, with a dissent from the Director of Air Force Intelligence, that Iraq was developing small UAVs "probably" for BW delivery which could be used against U.S. forces and allies in the region.[581] In addition, the NIE mentioned the concern of most agencies about the possible intent to use UAVs as delivery systems against the U.S. homeland.[582] This possible use was based on the attempted procurement of U.S. mapping software by an Iraqi procurement agent.[583]

As noted, the Director of Air Force Intelligence dissented from the majority view. In contrast to other organizations, the Air Force judged that Iraq was developing UAVs "primarily for reconnaissance rather than [as] delivery plat-

forms for [CW or BW] agents."[584] The Air Force further noted that CW or BW delivery is "an inherent capability of UAVs but probably is not the impetus for Iraq's recent UAV programs."[585]

Analysts' judgments that Iraq's small UAVs were intended for BW delivery were based on the following logic: the Iraqis had admitted that the MiG-21 program was intended for BW delivery, and analysts judged that the L-29 program, for which there was some evidence of a BW-delivery mission, was the successor to the MiG-21 program. Because the L-29 program had suffered set-backs in late 2000 after a crash, analysts then deduced that Iraq's new, small UAVs may have been designed to replace the L-29 effort, and that they were therefore also intended to deliver BW agents.[586]

There was very little reporting, however, to support the conclusion that the small UAVs were "probably" intended for BW delivery. Only one human intelligence report indicated that small UAVs were intended for CW or BW delivery.[587] Given the dearth of reporting on the purpose for the small UAVs, analysts instead deduced their intended purpose from Iraq's previous admissions and from what was assessed about the characteristics of Iraq's other UAV programs.

For example, analysts pointed to several human intelligence reports that suggested that Iraq's L-29 UAV program could be used to deliver CW or BW agents.[588] Only one of those reports, however, stated explicitly that the L-29 UAV was intended for biological or chemical weapon delivery, and that early 1998 report was based on a report of unknown reliability.[589] Analysts believed, though, that this conclusion was reinforced by separate reporting indicating that Iraq was prepared to use modified L-29 UAVs against U.S. forces in the Persian Gulf area; these UAVs, the reasoning went, would have been useless for delivery of conventional weapons and BW was therefore a likelier function.[590]

But there were other indications that the UAVs were *not* intended for BW delivery. Iraq's 1996 declaration to the United Nations indicated that the drones discovered in 1991 were actually intended for reconnaissance and aerial targeting—not BW delivery.[591] Intelligence reporting supported this view; Iraq was attempting to procure equipment for its small UAVs, which suggested the UAVs' purpose was reconnaissance. [592] Finally, as noted in the Air Force dissent, the small UAVs were not ideally suited for BW or CW

delivery; the Air Force assessed instead that "the small size of Iraq's new UAV strongly suggests a primary role of reconnaissance, although chemical/biological weapons (CBW) delivery is an inherent capability."[593] Although CIA's WINPAC had published an Intelligence Assessment in 2001 that discussed these possible non-BW delivery missions for Iraq's UAVs, such alternative missions were not emphasized in the October 2002 NIE because WINPAC's "focus [in] the NIE was WMD delivery systems and not the Iraqi UAV program as a whole."[594]

In sum, the evidentiary basis for the pre-war assessment that Iraq was developing UAVs "probably intended" for BW delivery was based largely on the BW focus of Iraq's pre-1991 UAV programs and a thin stream of (primarily human intelligence) reporting that hinted at such a function for post-1991 UAVs.[595]

As noted above, the NIE also judged that Iraq's UAVs "could threaten…the U.S. Homeland."[596] This assessment was based on two streams of reporting: first, intelligence reporting indicating that the UAVs had a range of over 500 kilometers and could be launched from a truck; and, second, reporting that an Iraqi procurement agent was attempting to buy U.S. mapping software for its small UAVs.[597] The latter piece of information was, however, the only evidence that supported Iraq's *intent* to target the United States. Based on this stream of reporting, the NIE reasoned that, because the mapping software would be useless outside the United States, its procurement "strongly suggest[ed]" Iraq was interested in using the UAVs to target the United States.[598]

The procurement effort revealed by the reporting was spearheaded by an Iraqi procurement agent who had been involved in the pre-Gulf War Iraqi UAV program ("the procurement agent"). The procurement agent had subsequently emigrated to another country where he ran an illicit procurement network for Iraq.[599] In late 2000 or early 2001, the procurement agent received a "shopping list" from an Iraqi general associated with the UAV program that included autopilots and gyroscopes. To fill this request, the procurement agent researched potential suppliers for these items, and in May 2001 he submitted requests for price quotes to a manufacturer and a distributor for the requested items, which included autopilots and gyroscopes but also included "Map Source" mapping software. The distributor responded with a price quote for the autopilot package, which included "Garmin 50 State" topographic mapping software, also sold as "Map Source." After consulting with Baghdad and

soliciting a final price quote, in early 2002 the procurement agent submitted a final procurement list, which included the Garmin 50 State mapping software, to the distributor.[600]

Although the distributor had been assured by the procurement agent that the end-user was "legitimate," the distributor remained concerned about the procurement agent's interest in these items and contacted its own country's authorities in March 2002. The distributor also removed the mapping software from its website.[601]

Following the attempted procurement, several analytical assessments were published regarding the attempted procurement of the mapping software. An Intelligence Community Assessment titled *Current and Future Air Threats to the US Homeland*, published July 29, 2002, noted that Iraq was seeking route planning software and an associated topographic database "likely intended to use with its UAVs" and "almost certainly relate[d] to the United States."[602] CIA's Office of Near Eastern and South Asian Analysis also disseminated an intelligence assessment on August 1, 2002, observing that the mapping software would "provide precise guidance, tracking, and targeting in the United States." [603]

A liaison intelligence service subsequently approached the procurement agent to question him about the attempted procurement.[604] In these discussions, the procurement agent claimed that he had not intended to purchase mapping software of the United States. Although he admitted that the software he had ordered had not been "bundled" with other items he ordered, he explained that he had not well understood all of the elements of the package and had not wanted to miss out on an important piece of software. He said he had been concerned that the other system pieces might not work if he did not purchase the mapping software; it was cheap; and he had thought the system would allow the user to scan maps and program them into a GPS. Asked by the liaison service to submit to a thorough examination, the procurement agent refused.[605] Thus, by fall 2002, the CIA was still uncertain whether the procurement agent was lying.

While the October 2002 NIE was being coordinated, a CIA analyst interviewed the procurement agent in an effort to determine if his attempted procurement of the U.S. mapping software had in fact been inadvertent, as he claimed. The analyst initially concluded that the procurement agent was lying

because a review of the website showed that, contrary to the procurement agent's claims, the option to purchase the mapping software was not on the page with the autopilots and gyroscopes. After further research, however, the analyst determined that the version of the website that the procurement agent had accessed in early 2001 had in fact contained the configuration and software option that the procurement agent described. This discovery led the analyst to believe that the purchase order may have indeed been inadvertent.[606]

Although the CIA was now beginning to obtain indications that the procurement agent's attempted purchase of the U.S. mapping software may in fact have been inadvertent as the procurement agent claimed, CIA remained uncertain whether the procurement agent was lying.[607] As the National Foreign Intelligence Board was convening to review and approve the NIE, several CIA analysts expressed concern about its use of the words "strongly suggests" and recommended that the language be toned down. But these concerns did not reach the DCI himself until the Board process had concluded.[608] With the lengthy Board meeting finished, the DCI concluded that the word "strongly" would remain in the NIE because the coordination process was complete at that point and the new information had not been confirmed.[609]

As noted, the NIE also stated that gaps in accounting suggested that Iraq retained a small covert Scud force, and the NIE assessed that Iraq was deploying missiles capable of flying farther than the United Nations limit of 150 kilometers.[610]

***Post-NIE.*** The Intelligence Community's assessment that the UAVs were "probably" for BW delivery remained unchanged in the run-up to the war.[611] In a paper sent to the National Security Council in January 2003, the CIA noted that an Iraqi Ministry of Defense official had indicated that Iraq considered its UAVs to be an important strategic weapon.[612] And in testimony before the Senate Select Committee on Intelligence in early February 2003, DCI Tenet stated that "[w]e are concerned that Iraq's UAVs can dispense chemical and biological weapons."[613]

The Intelligence Community did, however, begin to retreat from its assessment that Iraq intended to target the U.S. homeland, though not quickly enough to prevent the charge's inclusion in the President's speech in Cincinnati in October 2002. In the immediate aftermath of the publication of the October 2002 NIE, CIA increasingly believed that the attempted purchase of

the mapping software—on which this judgment was based—may have been inadvertent.[614] Accordingly, at least one CIA analyst recommended that a reference to the UAVs targeting the United States be deleted from a draft Presidential speech. Because of persistent uncertainty within the analytical ranks about the significance of the mapping software, however, CIA and the Intelligence Community's official position remained unchanged from the NIE. The President's speech, which was delivered on October 7, 2002 in Cincinnati, therefore expressed concern "that Iraq is exploring ways of using these UAVs for missions targeting the United States."[615]

Subsequent analytical products did begin to reflect the uncertainty over the significance of the mapping software, though. An NIE addressing the UAV question, entitled *Nontraditional Threats to the US Homeland Through 2007*, which was approved by the National Foreign Intelligence Board in November 2002, was not published for two months because of disagreement over whether the order for the U.S. mapping software indicated Iraqi intent to target the U.S. homeland.[616] The *Nontraditional Threats* NIE ultimately addressed the UAV issue in terms of capabilities rather than intent. That is, that NIE phrased the first judgment like the October 2002 Iraq NIE, noting that Iraqi UAVs "could strike the US Homeland if transported to within a few hundred kilometers," but phrased the software judgment only in terms of capability, noting that this "[route planning] software…could support [the] programming of a UAV autopilot for operation in the United States." For their parts, the Air Force, DIA, and the Army assessed that the purpose of the acquisition was to obtain generic mapping capability and that that goal was "not necessarily indicative of an intent to target the US homeland."[617]

By early March 2003, days before the March 19 invasion of Iraq, the CIA had further pulled back from its October NIE view, concluding in a memorandum to the Chairman of the House Permanent Select Committee on Intelligence that it was an open question whether the attempted procurement of the mapping software had been the result of a specific request from Baghdad or had been inadvertent.[618] CIA also advised senior policymakers of this change in view. In the memorandum, the CIA stated that it "[had] no definite indications that Baghdad [was] planning to use WMD-armed UAVs against the U.S. mainland….[Although] we cannot exclude the possibility that th[e] purchase [of mapping software] was directed by Baghdad, information acquired in October suggests that it may have been inadvertent."[619]

With respect to ballistic missiles, CIA's position remained unchanged after the NIE.[620] Subsequent to the NIE, the Intelligence Community confirmed from Iraq's December 2002 declaration to the United Nations that Iraq had two versions of the al-Samoud missile, as described in the NIE. The longer-range version was inefficiently designed and did not go as far as the NIE had postulated, but it did have a range in excess of 150 kilometers.[621]

## Post-War Findings of the Iraq Survey Group

The Iraq Survey Group concluded that, although Iraq had pursued UAVs as BW delivery systems in the past, Iraq's pre-Operation Iraqi Freedom program to develop small, autonomous-flight UAVs had actually been intended to fulfill reconnaissance and airborne electronic warfare missions. The ISG found no evidence suggesting that Iraq had, at the time of the war, any intent to use UAVs as BW or CW delivery systems.[622]

The ISG concluded that Iraq's purpose in converting a MiG-21 into a Remotely Piloted Vehicle (RPV) in early 1991 had been to create a CBW delivery system.[623] After the MiG-21 RPV program failed, Iraq in 1995 resumed efforts to convert manned aircraft into RPVs, this time with an L-29 jet trainer.[624] The ISG, however, was unable to establish whether the L-29 had an intended CBW role, although the ISG did obtain some indirect evidence that the L-29 RPV may have been intended for CBW delivery.[625] The ISG also concluded that Iraq had the capability to develop chemical or biological spray systems for the L-29, but found no evidence of any work along these lines.[626] The L-29 program ended in 2001.[627]

After several crashes of the L-29s, Iraq began to pursue long-range UAV options, probably at some point in 2000.[628] The ISG assessed, however, that these small UAVs had *not* been intended for use as chemical or biological delivery systems.[629] Specifically, although these small UAVs had the range, payload, guidance, and autonomy necessary to be used as BW delivery platforms, the ISG found no evidence that Iraq had intended to use them for such a purpose, had a suitable dispenser available, or had conducted research and development activity associated with use as a BW delivery system.[630]

The more advanced of Iraq's two UAV programs, the Al-Musayara-20, had actually been developed for use as a reconnaissance platform, according to a senior Iraqi official.[631] An interview with an Iraqi military official after Oper-

ation Iraqi Freedom revealed that many general officers had been shot down on helicopter reconnaissance missions during the Iran-Iraq war and therefore the military was interested in developing a UAV to perform such missions.[632] According to another official, although the Al-Musayara-20 was developed for a reconnaissance role, other roles, such as for the delivery of high explosives, were also considered.[633]

A competing program to the Al-Musayara, the Al Quds UAV program, had been less advanced but had included prototypes of varying sizes and weights.[634] The ISG concluded that the Al Quds program had been intended as an airborne electronic warfare platform.[635] Like the Al-Musayara, the Al Quds UAV had the range, autonomous guidance, and payload to enable it to deliver CBW.[636] The ISG uncovered no evidence, however, that Iraq had been developing a dispenser or had the intent to use the UAV as a BW delivery system. The Al Quds UAV was still in development when the war started.[637]

According to the Iraq Survey Group, Iraqi officials denied deliberately seeking to acquire mapping software for the United States, but did say they received mapping software that came as part of the package with the autopilots they purchased.[638] An official claimed to have received several autopilots for UAVs through the procurement agent, but asserted that these autopilots were never installed because they arrived on the eve of the war. The official was unaware of the current location of the autopilots.[639]

Regarding missile systems, the Iraq Survey Group concluded that Iraq had been developing and deploying ballistic missiles that exceeded United Nations restrictions.[640] The ISG concluded that Iraq had not possessed Scud or Scud-variant missiles after 1991, having by then either expended or unilaterally destroyed its stockpile.[641]

## Analysis of the Intelligence Community's Pre-War Assessments

The Iraq Survey Group's uncovering of ballistic missile work that violated United Nations' restrictions affords a bright spot for the Intelligence Community's record of assessments on Iraq's unconventional weapons programs. The NIE accurately assessed that Iraq was deploying ballistic missiles with ranges exceeding United Nations restrictions.[642] And although the NIE did not assess accurately the status of Iraq's Scud missile force, we are not especially

troubled by this inaccuracy in light of the NIE's clear statement that this assessment was based merely on accounting discrepancies.[643]

The record of the Intelligence Community's performance on the UAVs is more mixed (in part because the Intelligence Community's assessments themselves shifted during the pre-war period). While these assessments accurately described the Iraqi UAVs technical *capability* to deliver BW, the Intelligence Community's assessments that the UAVs were intended for this purpose—or that Iraq intended to strike the United States—were not borne out by the ISG's findings.

It is worth considering why the Intelligence Community's assessments were more correct in this area than they were with respect to other aspects of Iraq's arsenal. One possible answer is that—unlike the status of Iraq's BW and CW stockpiles—certain questions about Iraq's delivery systems—especially missiles—could be answered through technical means that operate from outside of the denied area, and which are generally less subject to questions about reliability. The intentions of a closed regime, however, are difficult to penetrate, and the reliability of any such information is difficult to determine. In areas of analysis that turn largely on intent, therefore, such as whether a regime is producing BW or intends to use its UAVs for BW delivery, the quality of the analysis will be largely dependent on the quality of the available human intelligence and on the ability of signals intelligence to penetrate communications. This highlights the imperative for analysts to explain the premise of their judgments, particularly when the ultimate judgment may rest on a very thin stream of information or on a chain of assumptions about intent.

With that said, the pre-war assessments on Iraq's delivery systems reflect significant shortcomings in analysis.

**Delivery Systems Finding 1**

The Intelligence Community made too much of an inferential leap, based on very little hard evidence, in judging that Iraq's unmanned aerial vehicles were being designed for use as biological warfare delivery vehicles and that they might be used against the U.S. homeland.

The NIE went beyond what one could reasonably conclude from the intelligence by judging that Iraq's UAVs were "probably intended to deliver biological warfare agents." Although past Iraqi interest in UAVs as BW vehicles was a reasonable indicator that the interest may have continued, the paucity of subsequent evidence should have led to a more nuanced statement in the NIE—such as that BW delivery was a possible use, but not necessarily an intended one. That the NIE did not discuss in any detail other possible missions for the UAVs only compounded this problem.[644] Moreover, most analysts discounted specific reporting indicating that Iraq was seeking equipment suited to a reconnaissance mission for its UAVs.

The Intelligence Community's assessments about the purpose of Iraq's UAV programs rested largely on inferences drawn from the inherent capabilities of such UAVs and knowledge about Iraq's past UAV programs, as discussed above. The conclusion that the UAVs were probably intended for BW delivery, however, reached beyond what the intelligence would reasonably bear.

Similarly, the single stream of reporting that the Iraqi procurement agent was attempting to purchase U.S. mapping software was insufficient to justify the NIE's statement that this interest "strongly suggest[ed]" that Iraq was investigating ways to target the U.S. homeland with UAVs. While certain analysts took the proper steps to push the Intelligence Community back from this judgment after doubts about this reporting emerged, the Intelligence Community as a whole was slow to assimilate this new information—particularly given its critical importance.

**Delivery Systems Finding 2**

The Intelligence Community failed to communicate adequately to policymakers the weak foundations upon which its conclusions were based.

Whether or not any statement about attacking the U.S. homeland merited inclusion in the NIE, it is clear that the rather thin foundation for these assessments was not clearly communicated to policymakers. And the NIE's assessment that the UAVs were "probably intended" for BW delivery did not make clear that this conclusion rested largely on analytical assumptions about Iraqi intent based on the history of Iraq's UAV programs and on the UAVs' inherent capabilities. Nor did the NIE explain why it focused only on

a possible weapons-related role for UAVs. A WINPAC analyst subsequently explained that the NIE's purpose was to discuss Iraq's WMD programs, and that accordingly the UAV section addressed the UAVs' use as a BW delivery platform and not their other possible uses. The failure to explain that reasoning in the NIE, however, leaves the impression that other possible uses for the UAV had been rejected rather than simply not discussed.[645]

**Delivery Systems Finding 3**

The Intelligence Community failed to give adequate consideration to other possible uses for Iraq's UAVs or to give due credence to countervailing evidence.

Finally, once again, the UAV episode reflects the tendency of Intelligence Community analysts to view data through the lens of its overall assumptions about Saddam Hussein's behavior. As noted, the NIE itself did not discuss other possible purposes for the UAVs or explain why the Estimate focused only on a weapons-related purpose. In addition, however, the Intelligence Community was too quick to characterize evidence that contradicted the theory that UAVs were intended for BW delivery as an Iraqi "deception" or "cover story." And a Senior Executive Memorandum warned that Iraq "probably will assert that UAVs are intended as target drones or reconnaissance platforms" to counter the claim in the British and U.S. "white papers" that the UAVs have a BW delivery role.[646]

**Delivery Systems Finding 4**

The Intelligence Community was generally correct in assessing that Iraq was continuing ballistic missile work that violated United Nations restrictions, but erred in many of the specifics.

We commend the Intelligence Community for correctly assessing that Iraq was working on ballistic missile programs that violated United Nations strictures. As the ISG's findings demonstrate, however, many of the Community's specific estimates were off the mark. The Community judged, for instance, that Iraq retained a force of "up to a few dozen Scud-variant SRBMs [short-range ballistic missiles]."[647] The ISG concluded, however, that Iraq did not have any Scud missiles after 1991.[648] Similarly, the Community stated in the NIE that "in January 2002, Iraq flight-tested an extended-range version of the

al-Samoud that flew beyond the 150-km range limit." The Community subsequently learned that it had misidentified the missile and had incorrectly deduced the missile's range; in actuality, the missile, while it had a range that exceeded 150 kilometers, did not exceed that limit by as much as analysts initially thought because the engine was less effective than they estimated.[649]

In short, while the Community was technically correct that Iraq's missile systems violated United Nations strictures, it erred significantly in degree.

## Conclusion

As has proven the case with other pre-war Intelligence Community judgments about Iraq's unconventional weapons programs, the assumptions held by Iraq analysts about Saddam Hussein's behavior were not unreasonable ones. These assumptions, however, drove the Intelligence Community to make overly inferential leaps about Iraq's UAV program based on thin evidence, and to fail to communicate this thin evidentiary basis to policymakers. While we fully understand that, in the wake of September 11, the Community felt obliged to report even relatively unlikely threats against the United States, the Community should have at a minimum explained more fully the uncertainties underlying its assessments.

## REGIME DECISIONMAKING

### Regime Decisionmaking Summary Finding

The Intelligence Community, because of a lack of analytical imagination, failed even to consider the possibility that Saddam Hussein would decide to destroy his chemical and biological weapons and to halt work on his nuclear program after the first Gulf War.

The Intelligence Community failed to examine seriously the possibility that domestic or regional political pressures or some other factors might have prompted Saddam Hussein to destroy his stockpiles and to forswear active development of weapons of mass destruction after the first Gulf War.[650] The Community was certainly aware of the overall political dynamics that underpinned Saddam Hussein's regime—that he was a brutal dictator who ruled Iraq through a combination of violence, secrecy, mendacity, and fear—but the Community did not seriously consider the range of possible decisions that Saddam might make regarding his weapons programs given his idiosyncratic decisionmaking processes.

Though the likelihood that one of those possible decisions was to destroy his weapons seemed very remote to almost all outside observers, it was one that Community analysts at least should have seriously considered. In truth, any assessment of the effect of Saddam's political situation on his decisions about WMD in the years from 1991 to 2003 would more likely than not have resulted—and, in point of fact, did result—in the conclusion that Saddam retained his WMD programs.[651] But whether or not it was extraordinarily difficult (if not effectively impossible) for the Intelligence Community to have discerned Saddam Hussein's true intentions, the Community's lack of imagination about the range of strategies and tactics Saddam might adopt left the Community with an incomplete analytical picture.

Having gained access to Iraq and its leaders, the Iraq Survey Group concluded that the unlikely course of voluntary abandonment by Saddam Hussein of his weapons of mass destruction was, in fact, the reality. According to the ISG, Saddam's regime, under severe pressure from United Nations sanctions, reacted by unilaterally destroying its WMD stockpiles and halting work on its WMD programs.[652] Saddam decided to abandon his weapons programs

because the economy and infrastructure of Iraq were collapsing under the weight of the sanctions. Saddam therefore ordered the unilateral destruction of biological and chemical weapons stockpiles in 1991 and chose to focus on securing sanctions relief before resuming WMD development.[653] At the same time, in an attempt to project power—both domestically as well as against perceived regional threats such as Iran and Israel—Iraq chose to obfuscate whether it actually possessed WMD.[654] As a result, the U.S. Intelligence Community—and many other intelligence services around the world—believed that Iraq continued to possess unconventional weapons in large part because Iraqis were acting as if they *did* have them.

Like previous chapters, this section begins with a brief description of how the Intelligence Community assessed Baghdad's decisionmaking before the war and then compares that with the ISG's findings. We then describe the Community's lack of creative thinking about Saddam's motives that led to the failure even to consider the possibility that Saddam Hussein had decided to abandon his banned weapons programs.

## The Intelligence Community's Pre-War Assessments

The Intelligence Community's assessments of Saddam's thought processes in the decade before Operation Iraqi Freedom are reflected in two broad lines of analysis: the threats to Saddam's regime and his threat to regional security. Throughout both these areas, one aspect remained relatively constant—the Intelligence Community emphasized repeatedly that it lacked "solid information about the activities and intentions of major players in Iraq" and was, in the words of one senior intelligence official, "flying blind" on the subject.[655]

***Regime stability and decisionmaking.*** The Intelligence Community early on identified sanctions as a significant threat to Saddam's regime, but never assessed whether Saddam might address that threat by destroying his WMD. Immediately after the Gulf War, for example, the Intelligence Community prepared a Special National Intelligence Estimate assessing Saddam's prospects for survival in power.[656] That assessment noted that economic vulnerabilities presented a threat to Saddam's regime and that the "lifting of sanctions…would provide relief to the regime and would strengthen Saddam's prospects for survival."[657] The Special Estimate therefore assessed that Saddam would concentrate on getting sanctions eased or removed.[658]

Through the mid-1990s, the Intelligence Community continued to judge that the sanctions were a threat to the regime, but that Saddam "probably believe[d]" he could "outlast" them.[659] For example, in December 1993, the Intelligence Community produced another NIE on Saddam's prospects for survival, judging that the United Nations sanctions were "Saddam's Achilles' heel" because of their debilitating effect on the Iraqi economy.[660] The NIE did not consider the possibility that Iraq would actually comply with United Nations resolutions. In fact, the Estimate identified as one of the assumptions underlying the analysis that "Saddam Husayn would not fully comply with U.N. Resolutions."[661]

By June 1995, as living conditions and the economy continued to decline, the Intelligence Community assessed that Saddam's overall strategy was to seek a lifting of sanctions with the lowest possible level of compliance with UNSCOM's demands for a full accounting of Iraq's WMD programs.[662] Laying out Saddam's options, a June 1995 Special Estimate judged that in the short term Saddam was "likely to make a gesture to UNSCOM…by providing limited additional information on Iraq's BW program."[663] If that gesture failed to achieve relief from sanctions within three months, however, Saddam "probably [would] return to a confrontational mode."[664] Such a "confrontational mode" included suspending cooperation with UNSCOM, sabotaging or obstructing UNSCOM monitoring, and expelling or taking hostage United Nations personnel.[665] In short, the Intelligence Community judged that Saddam would choose confrontation over greater cooperation with the United Nations as a way to end sanctions.[666]

Throughout the remainder of the 1990s, the Intelligence Community continued to assess that sanctions threatened Saddam's regime, but also that "Saddam [was] determined to maintain elements of his WMD programs and probably calculate[d] he [could] stonewall UNSCOM while wearing down the Security Council's will to maintain sanctions."[667] Saddam's success in undermining international support for the sanctions and in repressing internal dissent also gave him greater confidence and resolve.[668] But more importantly, the commerce allowed under the Oil-for-Food program fueled international perceptions that sanctions had weakened.[669] This weakening, combined with the failure of UNSCOM to "uncover tangible proof of Iraqi concealment of weapons of mass destruction," bolstered domestic and international perceptions of the regime's strength.[670]

At the same time, by the end of the decade the Community assessed that Saddam "appear[ed] to have made a strategic decision that confrontation would be necessary to gain an end to the sanctions."[671] Saddam felt "that putting pressure on UNSCOM and the Security Council [was] the only way to achieve his goal of ending sanctions," according to the Intelligence Community, because Saddam did "not intend to fully comply with relevant Security Council resolutions."[672]

The Intelligence Community viewed Iraq's behavior vis-à-vis the United Nations inspections during this time against the backdrop of these assessments and of Iraq's history of concealing its WMD programs.[673] Accordingly, the Community judged that Iraq would continue to obstruct inspections "to the degree they believe[d] the inspections [would] undermine the security apparatus or uncover proscribed materials."[674] Thus, when Iraq agreed to the resumption of inspections in 2002, the Intelligence Community judged that Iraq did so in part because of confidence in its ability to hide its weapons-related activities.[675] The Community also assessed that Saddam was motivated to reengage with the United Nations in order to avoid U.S. military intervention.[676] If such delaying tactics failed to divert an attack, Iraq "could make a tactical retreat by acceding to some United Nations and U.S. demands and then reneg[ing] on them at the earliest opportunity."[677] Although Iraq had tried to open several back channels to the United States seeking improved relations, the Community viewed these moves as public relations efforts and did not consider as an option the possibility that Iraq would actually comply with United Nations resolutions.[678]

Still, analysis of Saddam's thinking and motivations remained largely speculative. In addition to the simple lack of information on Saddam's plans and intentions, the nature of Saddam's decisionmaking process, which the Intelligence Community assessed as highly centralized and therefore difficult to penetrate, compounded analysts' difficulties.[679] Saddam made "all key policy decisions" with little input from the bureaucracy, and he usually acted quickly and decisively.[680] He could also be "impulsive and deceptive" about his decisions.[681] Moreover, the Intelligence Community judged that Saddam "rule[d] primarily by fear," using his control over the military, security, and intelligence services to "impose his absolute authority and crush resistance."[682] Saddam reinforce[d] this control through "prominent members of his Tikriti clan who occup[ied] key leadership positions."[683] As a result, "all major decisions [were] made by Saddam and a few close relatives and associates."[684]

The Intelligence Community noted that these characteristics of Saddam's leadership style made it very difficult to read his intentions.[685]

***Regional security and decisionmaking.*** The Intelligence Community assessed that regional supremacy for Iraq remained Saddam Hussein's fundamental goal from 1991 through 2003.[686] The Community judged, though, that to achieve that goal Saddam would need to rebuild Iraq's military might—including weapons of mass destruction.[687]

But, according to the Intelligence Community, Iraq's conventional military capabilities had deteriorated significantly during this time. By 1999, after four more years of sanctions and damage inflicted by U.S. military operations, Saddam's military was "smaller and much less well-equipped than it was on the eve of his 1990 invasion of Kuwait."[688] By 2002, the Community assessed that "Iraqi military morale and battlefield cohesion [were] more fragile today than in 1991."[689]

With respect to WMD capabilities, on the other hand, the Community's assessments that Iraq "retain[ed] residual chemical and biological weapons of mass destruction" remained constant.[690] Although cautioning that reading Saddam's intentions was difficult and that "critical factors important in shaping his behavior [we]re largely hidden from us," the Community nonetheless assessed that Saddam was "determined to retain elements of his WMD programs so that he [would] be able to intimidate his neighbors and deter potential adversaries such as Iran, Israel, and the United States."[691] Given Iraq's history with WMD, its desire for regional dominance, and the weaknesses in its conventional military forces, the Community did not consider the possibility that Saddam would try to achieve such intimidation and deterrence while bluffing about his possession of WMD.[692]

## Post-War Findings of the Iraq Survey Group

The Iraq Survey Group concluded that Saddam Hussein unilaterally destroyed his WMD stocks in 1991. Saddam apparently concluded that economic sanctions posed such a threat to his regime that, although he valued the possession of WMD, he concluded that he had to focus on sanctions relief before resuming WMD development.

***Background.*** Iraq's successful use of CW to repel human-wave attacks in the Iran-Iraq war had convinced Saddam Hussein of the importance of WMD and it became an "article of faith" for Saddam that WMD and theater ballistic missiles were necessary to secure Iraqi national security.[693] Saddam also believed that Iraq's possession of WMD and Iraq's willingness to use it "contributed substantially to deterring the United States from going to Baghdad in 1991."[694]

***The destruction of WMD.*** After the Gulf War, however, the United Nations passed resolutions explicitly linking the removal of economic sanctions with Iraq's WMD disarmament.[695] Saddam Hussein initially judged that the sanctions would be short-lived, that Iraq could weather them by making a few limited concessions, and that Iraq could successfully hide much of its preexisting weaponry and documentation.[696] Accordingly, Iraq declared to the United Nations part of its ballistic missile and chemical warfare programs, but not its biological or nuclear weapons programs.[697] But after initial inspections proved much more thorough and intrusive than Baghdad had expected, Saddam became concerned. In order to prevent discovery of his still-hidden pre-1991 WMD programs, Saddam ordered Hussein Kamil to destroy large numbers of undeclared weapons and related materials in July 1991.[698]

According to the Iraq Survey Group, Saddam's decision to destroy Iraq's WMD stockpiles in 1991 was likely shared with only a handful of senior Iraqi officials, a decision that would have important and lasting consequences.[699] Saddam so dominated the political structure of the Iraqi regime that his strategic policy and intent were synonymous with the regime's strategic policy and intent.[700] Moreover, in addition to dominating the regime's decisionmaking, Saddam also maintained secrecy and compartmentalization in his decisions, relying on a few close advisors and family members.[701] And Saddam's penchant for using violence to ensure loyalty and suppress dissent encouraged a "culture of lying" and discouraged administrative transparency.[702] As a result, the ISG concluded that instructions to subordinates were rarely documented and often shrouded in uncertainty.[703] The decision to destroy the WMD stockpiles was therefore confined to a very small group of people at the top of the Ba'ath pyramid.

***The sanctions bind.*** By the mid-1990s, United Nations sanctions were taking a serious toll; removing them therefore became Saddam's first priority, according to the ISG.[704] Iraq's failure to document its unilateral destruction

of WMD, however, complicated this effort. Also complicating Saddam's goal of sanctions removal was his continuing concern with regional threats to his security. Although he had destroyed his militarily significant WMD stocks, his "perceived requirement to bluff about WMD capabilities made it too dangerous to clearly reveal" Iraq's lack of WMD to the international community, especially Iran.[705] Saddam was therefore in a bind, on the one hand wanting to avoid being caught in a violation of United Nations sanctions but, on the other, not wanting his rivals to know of his weakness.

Saddam decided to strike the balance between these competing objectives, according to the ISG, by preserving Iraq's ability to reconstitute his WMD while simultaneously seeking sanctions relief through the appearance of cooperation with the IAEA, UNSCOM, and, later, the United Nations Monitoring Verification and Inspection Commission (UNMOVIC).[706] Iraq's behavior under the sanctions reflects that the Iraqis "never got the balance right."[707] Though Saddam repeatedly told his ministers not to participate in WMD-related activity, he at the same time was working to preserve the capability eventually to reconstitute his unconventional weapons programs.[708] And the Iraqis continued to conceal proscribed materials from United Nations inspectors.[709] Moreover, even when there was nothing incriminating to hide, the Iraqis did not fully cooperate with the inspectors, judging that an effective United Nations inspection process would expose Iraq's lack of WMD and therefore expose its vulnerability, especially vis-à-vis Iran.[710]

The regime's decision to disclose long-concealed WMD documents in the wake of Hussein Kamil's defection in 1995 further eroded confidence in the credibility of Iraqi declarations. The ISG concluded that the release of these documents served only to validate UNSCOM concerns that Iraq was still concealing its WMD programs.[711]

***Suspending cooperation with the United Nations.*** Angered by the continuing sanctions, inspections, and military attacks such as Operation Desert Fox, Saddam Hussein in a secret meeting in 1998 unilaterally abrogated Iraqi compliance with all United Nations resolutions, though, according to the ISG, it is unclear if anything concrete followed from this decision.[712] Meanwhile, Iraq continued to take advantage of the Oil-for-Food Program to augment regime revenue streams. Saddam Hussein used much of Iraq's growing reserves of hard currency to invest in Iraq's military-industrial complex, to procure dual-

use materials, and to initiate military research and development projects. Sanctions remained in place, however.[713]

With international scrutiny bearing down on Iraq in late 2002, Saddam Hussein finally revealed to his senior military officials that Iraq had no weapons of mass destruction.[714] His generals were "surprised" to learn this fact, because Saddam's "boasting" had led many to believe Iraq had some hidden WMD capacity and because Saddam's secretive decisionmaking style fostered uncertainty.[715] In fact, senior officials were still convinced that Iraq had WMD in March 2003 because Saddam had assured them that if the United States invades, they need only "resist one week" and then Saddam would "take over."[716]

## Analysis of the Intelligence Community's Pre-War Assessments

Saddam Hussein's decisionmaking process was, as the Intelligence Community assessed before the war and the Iraq Survey Group confirmed, secretive and highly centralized. And in this sense, the Intelligence Community cannot be faulted for failing to penetrate this process. But we believe the Community is open to criticism for failing to appreciate the full range of Saddam's strategic and tactical decisionmaking options regarding his weapons programs. At the very least, the Community should have *considered* the possibility that Saddam had halted active pursuit of his WMD programs after 1991.

Saddam and his regime repeatedly insisted that all of Iraq's banned weapons had been destroyed and that there were no active programs to reconstitute the capability. The United Nations inspectors, after 1996, found no conclusive evidence that these claims were wrong. In retrospect, as found by the ISG, it is clear that the stockpiles and programs were not there to be found. The question therefore arises of why the Intelligence Community did not discover that fact before the war, or at least consider the possibility that, however improbably, Saddam was telling the truth.

As discussed above, the Intelligence Community made multiple—and avoidable—errors in concluding "with high confidence" that Saddam retained WMD stockpiles and programs. It is a separate question why the Community failed to conclude affirmatively that he did *not* have them.

In large part the explanation lies in Saddam's own behavior. He *had* concealed crucial facts about his WMD efforts. He *did* repeatedly and continually obstruct the inspectors, to the point, in 1998, of completely terminating cooperation and forcing the inspectors to conclude that they could no longer do their work. When someone acts like he is hiding something, it is hard to entertain the conclusion that he really has nothing to hide.

The failure to conclude that Saddam had abandoned his weapons programs was therefore an understandable one.[717] And even a human source in Saddam's inner circle, or intercepts of conversations between senior Iraqi leaders, may not have been sufficient for analysts to have concluded that Saddam ordered the destruction of his WMD stockpiles in 1991—and this kind of intelligence is extremely difficult to get. According to Charles Duelfer, the Special Advisor to the Director of Central Intelligence for Iraq's Weapons of Mass Destruction and head of the Iraq Survey Group, only six or seven senior officials were likely privy to Saddam's decision to halt his WMD programs.[718] Moreover, because of Saddam's secretive and highly centralized decisionmaking process, as well as the "culture of lies" within the Iraqi bureaucracy, even after Saddam informed his senior military leaders in December 2002 that Iraq had no WMD, there was uncertainty among these officers as to the truth, and many senior commanders evidently believed that there were chemical weapons retained for use if conventional defenses failed.[719]

That it would have been very difficult to get such evidence is, however, not the end of the story. Failing to conclude that Saddam had ended his banned weapons programs is one thing—not even considering it as a possibility is another. The Intelligence Community did not even evaluate the possibility that Saddam would destroy his stockpiles and halt work on his nuclear program. The absence of such a discussion within the Intelligence Community is, in our view, indicative of the rut that the Community found itself in throughout the 1990s. Rather than thinking imaginatively, and considering seemingly unlikely and unpopular possibilities, the Intelligence Community instead found itself wedded to a set of assumptions about Iraq, focusing on intelligence reporting that appeared to confirm those assumptions.

Over the course of 12 years the Intelligence Community did not produce a single analytical product that examined the possibility that Saddam Hussein's desire to escape sanctions, fear of being "caught" decisively, or anything else

would cause him to destroy his WMD.[720] The National Intelligence Officer for Near East and South Asia noted that such a hypothesis was so far removed from analysts' understanding of Iraq that it would have been very difficult to get such an idea published even as a "red-team" exercise.[721] An intellectual culture or atmosphere in which certain ideas were simply too "unrespectable" and out of synch with prevailing policy and analytic perspectives pervaded the Intelligence Community. But much of the conventional wisdom that led analysts to reject even the consideration of this alternative hypothesis was itself based largely on assumptions rather than derived from analysis of hard data.[722] In our view, rather than relying on inherited assumptions, analysts need to test favored hypotheses even more rigorously when the paucity of intelligence forces analysts to rely, not on specific intelligence, but on a country's history, politics, and observed behavior.[723]

## Conclusion

Iraq's decision to abandon its unconventional weapons programs while simultaneously hiding this decision was, at the very least, a counterintuitive one. And given the nature of the regime, the Intelligence Community can hardly be blamed for not penetrating Saddam's decisionmaking process. In this light, it is worth noting that Saddam's fellow Arabs (including, evidently, his senior military leadership as well as many of the rest of the world's intelligence agencies and most inspectors) also thought he had retained his weapons programs, thus responding to charges that the Community was projecting Western thinking onto a product of a foreign culture.

What the Intelligence Community *can* be blamed for, however, is not considering whether Saddam might have taken this counterintuitive route. Community analysts should have been more imaginative in contemplating the range of options from which Saddam might select. While such imaginative analysis would not necessarily or even likely have ultimately led analysts to the right conclusion, serious discussion of it in finished intelligence would have at least warned policymakers of the range of possibilities, a function that is critically important in the inherently uncertain arena of political analysis.

## CAUSES FOR THE INTELLIGENCE COMMUNITY'S INACCURATE PRE-WAR ASSESSMENTS

The Intelligence Community fundamentally misjudged the status of Iraq's nuclear, biological, and chemical programs. While the Intelligence Community did accurately assess certain aspects of Iraq's programs, the Community's central pre-war assessments—that Iraq had biological and chemical weapons and was reconstituting its nuclear weapons program—were shown by the post-war findings to be wrong.[724] The discrepancies between the pre-war assessments and the post-war findings can be, in part, attributed to the inherent difficulties in obtaining information in denied areas such as Iraq. But the Intelligence Community's inaccurate assessments were also the result of systemic weaknesses in the way the Community collects, analyzes, and disseminates intelligence.

### Collection

The task of collecting meaningful intelligence on Iraq's weapons programs was extraordinarily difficult. Iraq's highly effective denial and deception program (which was employed against all methods of U.S. collection), the absence of United Nations inspectors after 1998, and the lack of a U.S. diplomatic presence in-country all contributed to difficulties in gathering data on the Iraqi regime's purported nuclear, biological, and chemical programs. And these difficulties were compounded by the challenge of discerning regime intentions.

Nonetheless, we believe the Intelligence Community could have done better. We had precious little human intelligence, and virtually no useful signals intelligence, on a target that was one of the United States' top intelligence priorities. The preceding sections, which have focused on the Intelligence Community's assessments on particular aspects of Iraq's weapons programs, have tended to reflect shortcomings in what is commonly referred to as "tradecraft"; the focus has been on questions such as whether a critical human source was properly validated, or whether analysts drew unduly sweeping inferences from limited or dubious intelligence. But it should not be forgotten why these tradecraft failures took on such extraordinary importance. They were important because of how little additional information our collection agencies managed to provide on Iraq's weapons programs.

This was a problem the Intelligence Community saw coming. As early as September 1998, the Community recognized its limited collection on Iraq.[725] The National Intelligence Council noted these limits in 1998, the specifics of which cannot be discussed in an unclassified forum.[726] Yet the Intelligence Community was still unwilling—or unable—to take steps necessary to improve its capabilities after late 1998. In short, as one senior policymaker described it, the Intelligence Community after 1998 "was running on fumes," depending on "inference and assumptions rather than hard data."[727]

This section examines and assesses the performance of each of the collection disciplines on Iraq's weapons programs.

### *Human Intelligence*

Human intelligence collection in Iraq suffered from two major flaws: too few human sources, and the questionable reliability of those few sources the Intelligence Community had. After 1998, the CIA had no dedicated unilateral sources in Iraq reporting on Iraq's nuclear, biological, and chemical programs; indeed, the CIA had only a handful of Iraqi assets in total as of 2001.[728] Furthermore, several of the liaison and defector sources relied upon by the Intelligence Community, most prominently Curveball, proved to be fabricators. Several systemic impediments to effective collection contributed to this dearth of human intelligence.

**Conclusion 1**

Saddam Hussein's Iraq was a hard target for human intelligence, but it will not be the last that we face. When faced with such targets in the future, the United States needs to supplement its traditional methodologies with more innovative approaches.

There are several reasons for the lack of quality human sources reporting on Iraqi weapons programs. At the outset, and as noted above, Iraq was an uncommonly challenging target for human intelligence. And given the highly compartmented nature of Saddam Hussein's regime, it is unclear whether even a source at the highest levels of the Iraqi government would have been able to provide true insight into Saddam's decisionmaking. The challenges revealed by the Iraq case study suggest some inherent limitations of human intelligence collection.

But these difficulties also point to the need, not only for improving traditional human source collection, but also for exploring new methods to approach such targets. Although CIA's Directorate of Operations has a well-developed methodology for recruiting and running assets in denied areas, the nature of the WMD target, particularly as aspects of it may migrate away from centralized, state-run programs, indicates that current methodologies should be supplemented with alternative approaches. In particular, when we want information about procurement networks or non-state run proliferation activities of interest, then we may need to use non-traditional platforms. The technical complexity of the WMD target also suggests that it may require a cadre of case officers with technical backgrounds or training. We discuss the possibilities—and the limitations—of some of these new approaches in Chapter Seven (Collection).

The Iraq case study also reveals the importance of liaison relationships for exploiting human sources in denied areas. Reliance on liaison sources, without any knowledge of the identity of the source or subsource(s), can be problematic, as the Curveball episode most painfully demonstrates. But liaison services can provide invaluable access to targets the U.S. Intelligence Community may find it difficult, if not impossible, to recruit or penetrate. It is thus critical to enhance our intelligence from liaison services.

### Conclusion 2

Rewarding CIA and DIA case officers based on how many assets they recruit impedes the recruitment of *quality* assets.

This case study also suggests that current internal promotion and incentive structures are impediments to recruitment of quality assets. In practice, both CIA's Directorate of Operations (DO) and DIA's Defense HUMINT Service reward case officers based largely on the quantity rather than quality of their recruitments.[729] While this is in part because quality is inherently difficult to measure, the "numbers game" encourages officers to focus their recruitment efforts on assets who are easier to recruit—often individuals who are themselves several steps removed from information of intelligence value. Other activities that may enhance the long-term ability to recruit quality assets—language or WMD-related technical training, for example—are also often dis-

couraged because of the significant amount of time such training takes out of the officer's career.

Finding the right personnel incentive structures is a perennial concern, and CIA's DO has taken some positive steps in recent years. But much more needs to be done. In Chapters Six (Management) and Seven (Collection) of our report, we offer several recommendations aimed at improving the personnel system within the Intelligence Community.[730]

**Conclusion 3**

The CIA, and even more so the DIA, must do a better job of testing the veracity of crucial human sources.

Another problem was the questionable reliability of the few human sources the Community had. As the Curveball and Niger experiences illustrate, asset validation and authentication are crucial to the Intelligence Community's ability to produce reliable intelligence. Although the CIA has an established asset validation system in place, the system and its use are not without flaws. As practiced, asset validation can sometimes become an exercise in "checking the boxes" rather than a serious effort to vet and validate the source.

On the other hand, at least the CIA understands the importance of asset validation. With respect to Curveball—the primary source of our intelligence on Iraq's BW program—the Defense HUMINT Service disclaimed any *responsibility* for validating the asset, arguing that credibility determinations were for analysts and that the collectors were merely "conduits" for the reporting.[731] This abdication of operational responsibility represented a serious failure in tradecraft.[732]

Although lack of direct physical access to the source made vetting and validating Curveball more difficult, it did not make it impossible. While Defense HUMINT neglected its validation responsibilities, elements of the CIA's DO understood the necessity of validating Curveball's information and made efforts to do so; indeed, they found indications that caused them to have doubts about Curveball's reliability.[733] The system nonetheless "broke down" because of analysts' strong conviction about the truth of Curveball's information and because the DO's concerns were not heard outside the DO.

In that regard, although CIA was alert to the need to assess Curveball's credibility, CIA was insufficiently diligent in following up on concerns that surfaced regarding his reliability. When what had been "handling" concerns became issues that reflected more directly on Curveball's veracity, working-level CIA officials did not press these concerns early enough or with sufficient vigor to the senior-most levels of CIA and senior leaders did not pay enough attention to those concerns that were expressed.

For its part, these senior-most levels of management at CIA—including the Deputy Director for Operations and the Deputy Director of Central Intelligence—were remiss in not raising concerns about Curveball with senior policymakers before the war. Even though these concerns may not have been raised with sufficient passion to indicate a serious problem, CIA management should at a minimum have alerted policymakers that such concerns existed.

While the DO made some efforts to try to validate Curveball, its failure to authenticate the Niger reporting also reflected a tradecraft error. The CIA made no effort to authenticate the documents on which those reports were based—even though one of those reports was a "verbatim" text of a document, and even though there were doubts emerging about their authenticity.

This said, we of course do not suggest that reliance on human intelligence reporting should be limited only to those sources who have been fully vetted and validated. The Intelligence Community does, however, need to ensure that consumers of intelligence have better visibility into the Community's assessment of the integrity of a given source.

### Conclusion 4

Iraq's denial and deception efforts successfully hampered U.S. intelligence collection.

Iraq's well-developed denial and deception efforts also hampered the Intelligence Community's ability to collect reliable intelligence. On the human intelligence front, for instance, by the early 1990s the Community had identified significant Iraqi efforts to manipulate U.S. human intelligence operations. The Iraqis sought to saturate U.S. intelligence collection nodes with false and misleading information.[734] Furthermore, Iraq's pervasive security

and counterintelligence services rendered attempts to recruit Iraqi officials extremely difficult.[735]

Iraq's denial and deception capabilities also frustrated U.S. signals and imagery collection due to Iraq's excellent security practices. The specifics of these capabilities are discussed in the classified report.

**Conclusion 5**

In the case of Iraq, collectors of intelligence absorbed the prevailing analytic consensus and tended to reject or ignore contrary information. The result was "tunnel vision" focusing on the Intelligence Community's existing assumptions.

At the same time, the knowledge that Iraq's denial and deception techniques had been so successful in the past hampered efforts to develop quality human sources. For example, several human sources asserted before the war that Iraq did not retain any WMD.[736] And one source, who may have come closer to the truth than any other, said that Iraq would never admit that it did *not* have WMD because it would be tantamount to suicide in the Middle East.[737] But the pervasive influence of the conventional wisdom—that Iraq had WMD and was actively hiding it from inspectors—created a kind of intellectual "tunnel vision" that caused officers to believe that information contradicting the conventional wisdom was "disinformation."[738] Potential sources for alternative views were denigrated or not pursued by collectors.[739] Moreover, collectors were often responding to requirements that were geared toward supporting or confirming the prevailing analytical line.[740] The reliance on prevailing assumptions was not just an analytical problem, therefore, but affected both the collection and analysis of information.

### *Technical Intelligence Collection*

Technical intelligence was able to provide very little in the way of conclusive intelligence about Iraq's purported WMD programs. This deficiency stemmed from several causes.

**Conclusion 6**

Intercepted communications identified some procurement efforts, but such intelligence was of only marginal utility because most procurements were of dual-use materials.

In the late 1990s, the Intelligence Community focused on targeting procurement networks. This approach was problematic, in part because much of the equipment and precursor materials required to produce biological and chemical weapons, and to a lesser extent nuclear weapons, can also serve other legitimate purposes. Also, attempted procurements cannot be equated with an actual weapons capability. Although evidence that a country such as Iraq was procuring dual-use items can of course be useful, such procurement activity will rarely provide unequivocal evidence of weapons activity. As such, information that Iraq was procuring industrial chemicals provided little insight into Iraq's CW programs because such purchases were consistent with the development of an indigenous chemical industry. This inherent problem was compounded by the Intelligence Community's tendency to exaggerate the nefariousness of Iraq's dual-use procurement efforts.

**Conclusion 7**

Signals intelligence against Iraq was seriously hampered by technical barriers.

The National Security Agency's (NSA's) lack of access was largely the result of technical barriers to collection. As a result, NSA was unable to exploit those communications that would be most likely to provide insights into Iraq's WMD programs.[741] The technical barriers to accessing these communications are substantial, and NSA and other signals intelligence collectors must

continue efforts to develop technical solutions to such challenges. The classified report discusses these technical barriers in greater detail.

### Conclusion 8

Other difficulties relating to the security and counterintelligence methods of the Iraqi regime hampered NSA collection.

The classified report discusses further reasons why signals intelligence collection against Iraq was so challenging.

### Conclusion 9

Traditional imagery intelligence has limited utility in assessing chemical and biological weapons programs.

Imagery intelligence is also limited in what it can reveal about a nation's WMD programs. Imagery intelligence will rarely, if ever, provide insight into intent regarding WMD—particularly CW or BW programs. Flawed conclusions drawn from imagery of suspected Iraqi CW sites before the war, for instance, demonstrate that even precise and high-quality photographs of a target may yield little of value or, worse, positively mislead.[742] While imagery will be a valuable tool for the Community in developing a full picture of a target country's infrastructure and overt movements, without credible human or signals intelligence imagery is of limited utility with regard to BW and CW. This said, imagery will nevertheless remain critical for satisfying requirements such as intelligence support to military operations, helping to cue other forms of collection by providing overhead images, and providing methods for corroborating or disproving information from other collection methods.

As the National Geospatial-Intelligence Agency's (NGA's) has conceded, the inherent nature of chemical and biological weapons facilities means that the infrastructure and activities of suspect WMD programs are difficult to assess even with sophisticated and expensive U.S. satellites. Imagery analysts must therefore look for "signatures" of suspicious activity. These signatures hold open the possibility of identifying suspect activity but are susceptible to error and denial and deception. As such, to answer the question whether a facility is

intended for the production of biological or chemical weapons, imagery analysis must be supplemented with other kinds of intelligence.

Beyond these straightforward difficulties, suspect activity can also be deliberately concealed from overhead reconnaissance.[743] Iraq—like many other countries with aspirations to develop nuclear, biological, and chemical weapons programs—was well aware of U.S. overhead collection capabilities and practices, and took steps to avoid detection.[744] Imagery intelligence will therefore remain only one piece of the collection effort against WMD, and will have to be used in conjunction with information from other sources.[745]

Despite these inherent limitations, the pre-war assessments of Iraq's chemical warfare program relied very heavily on imagery. For example, the NIE assessed that "much of" Iraq's estimated stockpile of 100 to 500 metric tons of CW was "added in the last year."[746] Analysts explained that this assessment—which indicated not only that Iraq had large stockpiles but that it was actively producing CW agents—was based largely on imagery showing "transshipment" activity that analysts judged to be the movement of CW munitions.[747] Post-war "reassessments" by the National Geospatial-Intelligence Agency, however, revealed that this transshipment activity was likely related to conventional maintenance and logistical activity.[748] Because of the dearth of solid reporting from signals or human intelligence on Iraq's chemical warfare program, imagery of "transshipments" was asked to carry more weight than it could logically bear.[749]

***Measurement and signature intelligence (MASINT).*** MASINT played a negligible role in intelligence collection against the Iraqi WMD target. There were several reasons for this.

**Conclusion 10**

MASINT collection was severely hampered by problems similar to those faced by other intelligence methods. Analysts' lack of familiarity with MASINT also reduced its role in analysts' assessments of Iraq's WMD programs.

MASINT collection was hampered by practical problems stemming from the difficulties inherent in collecting intelligence against a regime such as Saddam's Iraq.[750] Furthermore, information from other intelligence collection

methods is important to cue MASINT collection.[751] The difficulties described above, which are described in greater detail in the classified report, rendered MASINT collection an even more difficult task than usual.

Second, in part because of a lack of collection and in part because of a general lack of understanding among analysts about MASINT and its capabilities, very little MASINT actually factored into Community assessments. There was MASINT reporting on WMD—the National Intelligence Collection Board noted that from June 2000 through January 2003 MASINT sources produced over 1,000 reports on Iraqi WMD (none of which provided a definitive indication of WMD activity).[752] But the reporting did not play a significant role in forming assessments about Iraq's WMD programs.[753] This lack of reliance was no doubt due in part to the tendency among analysts to discount information that contradicted the prevailing view that Iraq had WMD. But it was also due in part to unfamiliarity with, and lack of confidence in, MASINT.[754]

### *Collection Management*

**Conclusion 11**

Recognizing that it was having problems collecting quality intelligence against Iraq, the Intelligence Community launched an effort to study ways to improve its collection performance. This process was hampered by haphazard follow-up by some agencies; in particular, NSA failed to follow-up promptly on the Intelligence Community's recommendations.

Our study of Iraq not only reveals shortcomings in (and inherent limitations of) specific collection disciplines; it also highlights the Intelligence Community's inability to harmonize and coordinate the collection process *across* collection systems. There are many reasons for the Community's inability to do so, including resource and personnel management issues. But another reason for the difficulty may be the simple fact that there is no institutionalized process above the various collection agencies that oversees the whole of collection. It was not until 1998 that a collection management system was established that was dedicated to "examin[ing] the [Intelligence Community]'s most intractable intelligence problems and develop[ing] new ways to improve collection."[755] That entity, the Collection Concepts Development Center (CCDC), was established by the Assistant DCI for Collection. When the CCDC tackled the problem of collection on Iraq—in 2000—it set out a

coordinated approach that sought to optimize the available collection resources. For example, the CCDC study recommended a shift of imagery collection away from military targets such as the no-fly zones and towards suspect WMD sites. The study also recommended ways for NSA to try to penetrate Iraq's communications, as discussed below. But the CCDC effort is sustained only through the force of the Assistant DCI for Collection's individual efforts. Our report will offer recommendations as to the best way that such an effort can be institutionalized within the Intelligence Community.

Such an institutionalized process would also ensure that new collection strategies are implemented by individual collection agencies. For example, as noted, the 2000 CCDC study addressed the problem presented by NSA's inability to exploit certain critical Iraqi communications. The CCDC recommended that NSA collect signals from a certain source to assess whether that source was being used for WMD-related communications.[756] NSA failed to pursue this recommendation vigorously.[757] Instead, NSA acknowledged that "NSA did not discover that the Iraqis had this mode of communications…until late 2002," at which time "NSA's limited resources were fully engaged with other priorities."[758] This anecdote highlights the imperative for a well-managed collection system, to ensure that we do not miss valuable collection opportunities in the future.

A related problem—that of the poor quality of interagency communication—is illustrated by imagery analysis of increased collection of suspected Iraqi CW sites in 2002. In this instance, analysts fundamentally misunderstood how imagery was collected, a significant breakdown in a crucial communication link between collectors and analysts. Until 2000, imagery intelligence collection had been largely oriented toward supporting military operations such as patrolling the no-fly zones.[759] Imagery collection operations against the Iraq WMD target more than doubled from 2001 through 2002, however, prompted largely by the aforementioned CCDC study, which recommended that more resources be focused on that target.[760] The increased coverage included images of ammunition depots that had not previously been imaged on a regular basis.[761] Analysts, however, were not aware of the degree to which imaging was increased during this period nor of the specifics of NGA's targeting changes.[762] As a result, analysts interpreted this imagery as reflecting new and increased activity—when, in reality, much of the "increase" in activity may have been simply an increase in the volume of imagery collected. [763]

## Analysis

Intelligence analysis is a tricky business. Analysts are often forced to make predictions in the absence of clear evidence—and then are pilloried after twenty-twenty hindsight reveals that they failed to paint a full picture from conflicting and scattered pieces of evidence. As we have seen, assessing the scope of an adversary's nuclear, biological, and chemical weapons programs poses an especially formidable challenge in this regard; extrapolations from past experience and thin streams of reporting are usually necessary.

Even the best analytical practices, therefore, will sometimes result in assessments that later prove inaccurate. But given the difficulties inherent in analyzing WMD programs—and the serious consequences for judging the capabilities and intentions of such programs incorrectly—it is imperative that the analysis on which such judgments are based be as rigorous, thorough, and candid as possible. In the case of Iraq, the analytical community fell short of this standard.

Analysts have indicated that their starting point for evaluating Iraq's WMD programs was Iraq's past. Analysts' assumptions were formed based on Iraq's history of producing CW and BW, its use of CW, its history of effectively concealing its nuclear program before the Gulf War, and the regime's failure to account for its previously declared stockpiles.[764] Thus, the analysts operated from the premise that Iraq very likely still possessed CW and BW, was still hiding it from inspectors, and was still seeking to rebuild its nuclear weapons program. The analytical flaw was not that this premise was unreasonable (for it was not); rather, it was that this premise hardened into a presumption, and analysts began to fit the facts to the theory rather than the other way around.

### Conclusion 12

Analysts skewed the analytical process by requiring proof that Iraq did not have WMD.

One consequence of this tendency was that analysts effectively shifted the burden of proof, requiring proof that Iraq did *not* have active WMD programs rather than requiring affirmative proof of their existence. Though the U.S. *policy* position was that Iraq bore the responsibility to prove that it did not have

banned weapons programs, the Intelligence Community's burden of proof should have been more objective. CIA's WINPAC nuclear analysts explained that, given Iraq's history of successful deception regarding the state of its nuclear program and evidence that Iraq was attempting to procure components that *could* be used in a uranium enrichment program, they could not envision having reached the conclusion that Iraq was *not* reconstituting its nuclear program. The analysts noted that they could have reached such a conclusion only if they had specific information from a very well-placed, reliable human source.[765] By raising the evidentiary burden so high, analysts artificially skewed the analytical process toward confirmation of their original hypothesis—that Iraq had active WMD programs.

**Conclusion 13**

Analysts did not question the hypotheses underlying their conclusions, and tended to discount evidence that cut against those hypotheses.

Indeed, it appears that in some instances analysts' presumptions were so firm that they simply *disregarded* evidence that did not support their hypotheses. As we saw in several instances, when confronted with evidence that indicated Iraq did not have WMD, analysts tended to discount such information. Rather than weighing the evidence independently, analysts accepted information that fit the prevailing theory and rejected information that contradicted it.[766] While analysts must adopt some frame of reference to interpret the flood of data they see, their baseline assumptions must be flexible enough to permit revision by discordant information. The analysts' frame of reference on Iraq's WMD programs—formed as it was by Iraq's previous use of such weapons, Iraq's continued efforts to conceal its activities, and Iraq's past success at hiding such programs—was so strong, however, that contradictory data was often discounted as likely false.

Analysts' discounting of contradictory information reflected, in part, an awareness of Iraq's sophisticated denial and deception efforts and of Iraq's past success in hiding the extent of its WMD programs. Reacting to that lesson, analysts understandably (if not wholly defensibly) began to view the absence of evidence of WMD as evidence of Iraq's ability to deceive the United States about its existence. For example, both CIA and the National Ground Intelligence Center simply assumed that Iraq's claims that the alumi-

num tubes were for rockets was a "cover story" designed to deflect attention from Iraq's nuclear program. Similarly, analysts had imagery intelligence from 2001 that contradicted Curveball's information about mobile BW facilities, but analysts believed that this discrepancy was attributable to Iraq's denial and deception capabilities.[767]

The disciplined use of alternative hypotheses could have helped counter the natural cognitive tendency to force new information into existing paradigms. Alternative hypotheses are particularly important for assessing WMD programs, which can be easily concealed under the guise of dual-use activity. With the aluminum tubes, the "transshipment" activity at ammunition depots, and the development of small UAVs, analysts did not fully consider the alternative (and non-WMD related) explanations. Analysts set aside evidence indicating a reconnaissance mission for the UAVs, and did not fully explore the possibility that the transshipment activity involved only conventional munitions. And with respect to the aluminum tubes, CIA and DIA analysts concluded that the tubes were destined for use in a gas centrifuge largely because they *could* be used for such a purpose, in the process discounting evidence that the tubes were in many respects better suited for use in rockets. [768]

The widely recognized need for alternative analysis drives many to propose organizational solutions, such as "red teams" and other formal mechanisms. Indeed, the *Intelligence Reform and Terrorism Prevention Act* mandates the establishment of such mechanisms to ensure that analysts conduct alternative analysis. Any such organs, the creation of which we encourage, must do more than just "alternative analysis," though. The Community should institute a formal system for competitive—and even explicitly *contrarian*—analysis. Such groups must be licensed to be troublesome. Further, they must take contrarian positions, not just ones that take a harder line (a flaw with the Team B exercise of the 1970s).[769]

The Iraq case shows, however, that alternative analysis mechanisms offer, at best, an incomplete solution to the problem. In addition to testing fully-developed judgments with formal red team exercises, analysts must incorporate the discipline of alternative hypotheses into the foundation of their analytical tradecraft, testing and weighing each piece of evidence. It would be unrealistic to "zero-base" every assessment, or to ignore history when forming analytical judgments. But the conventional wisdom must be tested throughout the analytical process to ensure that a position is not adopted without rigorous

questioning. We offer a variety of approaches to this problem in Chapter Eight (Analysis) of our report.

Competitive analysis must also take place at the institutional level. In other words, the need for individual analysts to question their hypotheses and challenge the conventional wisdom also applies to the Intelligence Community as a whole, and suggests the need to strengthen competitive analysis among agencies in the Intelligence Community.[770]

After September 11, the Intelligence Community was criticized for its failure to communicate and share information across agency lines. That failure prevented analysts from "connecting the dots" because information known to one agency was not put together with information known to another. With each agency holding one or two pieces of the puzzle, none could see the whole picture. The logical response, therefore, was to recommend the formation of centers to bring all the relevant information together. The Iraq story, however, presents a different set of problems. As discussed, the strength of the prevailing assumptions about Iraq presented a distinct picture to analysts and pieces of the puzzle that did not fit that picture were either made to fit awkwardly or discarded. The problem, therefore, was not that analysts lacked awareness of what other analysts were thinking; rather, the problem was that most analysts were thinking the same thing.

Strengthening competitive analysis among components of the Intelligence Community could help alleviate that problem. There *was* of course some competitive analysis on Iraq—the NIE contained dissenting positions from State's Bureau of Intelligence and Research (INR), DOE, and the Air Force.[771] And those dissenting positions were at least somewhat closer to the truth than the majority position. Although reasonable minds can differ as to how significant the dissents were (at least in the cases of INR and DOE),[772] such competitive analyses in general encourage the consideration of alternative views and ensure that those independent views reach policymakers.

**Conclusion 14**

The Community made serious mistakes in its technical analysis of Iraq's unconventional weapons program. The National Ground Intelligence Center in particular displayed a disturbing lack of diligence and technical expertise.

The problem of discounting contrary evidence was compounded by inexcusable analytical lapses. One reason that CIA analysts were confident in their conclusion that the aluminum tubes were for use in centrifuges and not rockets was that the "rocket experts" in the Intelligence Community, the National Ground Intelligence Center (NGIC), assessed that the tolerances of the tubes Iraq was seeking were "excessive" for rockets. But NGIC rocket analysts told Commission staff that at the time they made that assessment they were not aware of the tolerances required for the Iraqi Nasser 81 rockets, for the Italian Medusa rocket on which the Nasser 81 was based, or for comparable U.S. rockets.[773] NGIC should have been aware of these facts.

The reasons for this failure of technical analysis were not particularly grand. Rather, analysts in NGIC, used to focusing almost exclusively on Soviet weapons systems, simply did not do their homework in tracking down information about Iraqi and U.S. weapons that would have shed light on the question whether the aluminum tubes could be used in conventional rockets. CIA analysts, for their part, were too quick to see confirmation of their hypothesis—that Iraq would seek to reconstitute its nuclear program at the first opportunity—based on somewhat dubious technical evidence.

### Conclusion 15

Analysis of Iraqi weapons programs was also flawed by "layering," with one individual assessment forming the basis for additional, broader assessments that did not carry forward the uncertainties underlying each "layer."

A related concern is the problem of layering of analysis: the building of one judgment upon another without carrying forward the uncertainties of the earlier judgments.[774] The judgment in the October 2002 NIE that Iraq was reconstituting its weapons programs was built on previous assessments about Iraq's weapons programs. These earlier assessments, however, were based on relatively thin streams of reporting, yet the cumulative level of uncertainty was not reflected in the Key Judgments nor in some of the NIE's discussions. In brief, previous assessments based on uncertain information formed, through repetition, a relatively unquestioned baseline for the analysis in the pre-war assessments.

The NIE's CW assessments offer an example of the phenomenon. The NIE's estimates that Iraq had up to 500 metric tons of chemical weapons were based largely on accounting discrepancies and Iraq's CW production capacity rather than positive evidence.[775] Although the NIE conceded that "we have little specific information on Iraq's CW stockpile," it did not make clear that the baseline assumption rested largely on Iraqi accounting discrepancies. Because that baseline assumption was not made clear, the NIE gave the impression of greater certainty about the actual existence and size of stockpiles than was warranted. Similarly, the assessment that "much" of that stockpile was "added in the last year" was based largely on imagery evidence of "transshipment" in the spring of 2002.[776] Analysts assessed that Iraq had added to its CW stockpile in the previous year because the level of transshipment activity seen on imagery indicated that "CW is already deployed with the military logistics chain."[777] But that assessment in turn rested on whether the activity seen on imagery was CW-related. As the post-war reassessment by NGA concluded, it was not. By building one assessment on top of another without carrying forward the uncertainty from the first layer, the NIE gave the impression of greater certainty about its judgments than was warranted.[778]

This "layering" phenomenon occurred not only with respect to one line of analysis over time, but it also occurred across analytical lines. For example, a senior CW analyst related that he and other CW analysts had been "drifting" in the direction of concluding that Iraq did *not* have much of a CW program. The appearance of Curveball's reporting on BW, however, "pushed [CW analysts] the other way." The analyst explained that if Iraq was producing and hiding BW, then it was probably also producing and hiding CW. In other words, "much of the CW confidence was built on the BW confidence." [779]

### Conclusion 16

Analysis of Iraq's weapons programs took little account of Iraq's political and social context. While such a consideration would probably not have changed the Community's judgments about Iraq's WMD, the failure even to *consider* whether Saddam Hussein had elected to abandon his banned weapons programs precluded that possibility.

Another shortcoming of the pre-war assessments of Iraq's WMD programs was the failure to analyze the state of these programs within the context of

Iraq's overall political, social, cultural, and economic situation.[780] In short, the Intelligence Community did not sufficiently understand the political dynamics of Saddam Hussein's Iraq, and as a consequence did not understand the political and economic pressures that led to his decision to destroy his WMD stockpiles while continuing to obfuscate about Iraq's possession of WMD.

As the Iraq Survey Group found, Saddam was facing two opposing pressures—the need to get relief from sanctions and the need to project strength at home and abroad. Saddam reacted to these pressures, according to the ISG, by destroying his WMD stockpiles after the Gulf War and focusing on sanctions relief before resuming WMD development. At the same time, Saddam continued to hinder the inspectors and sow confusion about Iraq's WMD programs.[781]

Yet the weapons analysts did not consider how the political situation might have affected Baghdad's decisions regarding its weapons programs. To be sure, it is doubtful that such consideration would have changed the analytical outcome—the regional analysts were also operating under certain assumptions about Saddam's regime, and those assumptions did not allow for the possibility that Saddam would destroy his CW and BW stocks and halt work on his nuclear programs, as the ISG found. But the failure even to *consider* how the political dynamics in Iraq might have affected Saddam's decisions about his WMD programs was a serious shortcoming that resulted in an incomplete analytical picture.[782] The failure by the Intelligence Community to entertain the possibility that Saddam was actually telling the truth also inclined analysts to accept deeply problematic evidence that might have been more rigorously questioned if the Community had actually considered the possibility that Saddam had abandoned his banned programs.

Several related problems contribute to the lack of context in analytical products. One, there is not yet an institutionalized, effective method to exploit open source resources that would have allowed a better understanding of developments in Iraq. Two, analysts are rarely assigned to one substantive account for any length of time (with the exception of INR analysts) and cannot therefore develop the requisite expertise to evaluate contextual influences. (Of course, longevity on one account can exacerbate the problem of over-reliance on past judgments.) And three, the pressure to respond to current intelligence needs as opposed to long-term research efforts degrades the

overall level of expertise on all accounts. Given limited analytical resources, the demand for current intelligence suffocates long-term research and therefore largely precludes development of the kind of in-depth knowledge that such research fosters.[783] A related aspect of this problem is the current system of incentives for analysts, which rewards analysts for the quantity of finished intelligence pieces produced, and therefore encourages analysts to focus on current intelligence. CIA's Directorate of Intelligence is exploring ways to provide incentives for long-term research. Also, the Directorate's creation of a Senior Analytical Service to enable analysts to continue at the working-level (instead of moving into management) and still be promoted should help build expertise. We address these and other related issues in Chapter Eight (Analysis).

**Conclusion 17**

The Community did not adequately communicate uncertainties about either its sources or its analytic judgments to policymakers.

More generally, the pre-war assessments highlight the importance of correct presentation of material to consumers, particularly regarding the uncertainties of given judgments and how these judgments were made. While finished intelligence needs to offer a bottom line to be useful to the policymaker, it should also clearly spell out how and from what its conclusions were derived. In the case of WMD programs in hard target nations like Iraq, this means that policymakers must be made aware when—as will often necessarily be the case—many of the Community's estimates rely largely on inherently ambiguous indicators such as capabilities assessments, indirect reports of intentions, deductions based on denial and deception efforts associated with suspect WMD sites, and on ambiguous or thin pieces of "confirmatory" evidence. For example, the fact that the evidence for Iraq's biological weapons program relied largely on reporting from a single source, and that the evidence for Iraq's chemical weapons program derived largely from limited signature-based evidence of "transshipment" activity, should have been more transparent.

Such context is largely absent from the daily products provided to senior policymakers, however, and the daily dose of such products may provide a cumulative level of "certainty" that is unwarranted. Moreover, with respect to NIEs,

the "confidence measures" used to describe the level of certainty in the judgments are not well-explained or understood. A more detailed description, explanation, and/or display of what those confidence measures mean should be incorporated. And those measurements should be rigorously and consistently applied.

Ironically, the NIE did contain numerous caveats, but their impact was diminished by their presentation. For example, as noted, the NIE stated that "[t]oday we have less direct access and know even less about the current status of Iraq's nuclear program than we did before the Gulf War."[784] Yet that caveat came on page 13 of the NIE, after it had twice stated that Iraq was reconstituting its program and could have enough fissile material for a nuclear weapon in the next several years.

### Conclusion 18

The Community failed to explain adequately to consumers the fundamental assumptions and premises of its analytic judgments.

The fundamental assumptions and logical premises on which analytical judgments are based should be clearly explained. Analysts noted that the "impending war" influenced their approach to the pre-war assessments of Iraq's WMD programs, particularly the October 2002 NIE. That is, with the knowledge that U.S. troops would soon have to face whatever WMD capabilities Iraq had, analysts adopted more of a worst-case-analysis approach.[785] Yet that approach was not identified or explained to the reader of the NIE. By contrast, when the CIA's Counterterrorism Center prepared a paper on possible links between Iraq and al-Qa'ida, it clearly identified the analysis underlying that paper as of the aggressive, "dot-connecting" sort.[786]

Although too many qualifications can lead to equivocal analysis, when the evidence is equivocal, the conclusion must be as well. This must especially be the case when the results of debate about intelligence data or analysis will influence important policy decisions. Flagging the logical premises and baseline assumptions for the ultimate judgment would produce a better understanding by policymakers of the possible logical weaknesses in the assessment. It also would likely improve the analytic process as well, by forcing analysts themselves to articulate clearly their operative assumptions. Sim-

ilarly, analysis that relies heavily on a single source, such as on Curveball's reporting and on the presence of Samarra-type trucks to support the conclusions that Iraq had BW and CW, respectively, should be highlighted.

## Information Sharing

In addition to illuminating shortcomings in intelligence collection and analysis, our study of Iraq also highlighted a familiar challenge: that of ensuring effective sharing of information. In the Iraq case, the information sharing problem manifested itself in three specific ways: intelligence was not passed (1) from the collectors to the analysts; (2) from the analysts to the collectors; and (3) from foreign liaison services to the Intelligence Community.

### Conclusion 19

Relevant information known to intelligence collectors was not provided to Community analysts.

The lack of an effective system for information sharing between collectors and analysts is a well-known systemic problem, but one that has proven highly resistant to resolution. Intelligence Community collectors retain a strong institutional bias against sharing operational information with analysts—CIA's Directorate of Operations is often reluctant to share relevant operational information with CIA's Directorate of Intelligence, let alone with the rest of the Community or with policymakers. Similarly, NSA is reluctant to share raw data with anyone outside of NSA.[787] Both NSA and the DO have legitimate concerns for the protection of sources and methods, and this concern must be weighed carefully when determining whether, and in what form, to share information across the Community or even across directorates.

Our review of the Intelligence Community's performance on Iraq identified several specific shortcomings in the way that collectors share intelligence with analysts. First, the source descriptions on raw human source reporting often provided insufficient detail and clarity to allow analysts adequate insight into the source's reliability. For example, the CIA report on the alleged uranium deal that was sourced to Ambassador Wilson described him (unhelpfully) as "a contact with excellent access who does not have an established reporting record."[788] Source descriptions that provide more explicit information on the context in which the information was obtained can significantly

improve analysts' ability to gauge the credibility of that information. In September 2004, the CIA's DO implemented new source descriptions that are designed to provide additional such contextual detail.[789] This is an important step in the right direction, but more needs to be done.

Second, with CIA reporting, analysts were often unable to determine whether a series of raw human intelligence reporting came from the same source. For most reporting, there is currently no way to determine from the face of the CIA report whether a series of reports represents one source reporting similar information several times or several different sources independently providing the same information. For obvious reasons, it is important to distinguish corroboration from repetition. The improved source descriptions should help alleviate this problem, as will increased dialogue between collectors and analysts.

Finally, analysts often obtain insufficient insights into the operational details bearing on the reliability of sources.[790] Such information sharing is not an end in itself, of course. In the case of Curveball, for example, the DO *did* share operational information with DI analysts—including information that indicated possible problems with the source's reliability—but analysts' belief in Curveball's information remained unshaken. Increased dialogue, rather than simply sharing traffic, may help bridge these gaps.

It must be acknowledged that sharing operational details presents a great threat to the protection of sources and methods. Accordingly, any information sharing protocol must therefore be carefully tailored. The CIA recently conducted a DI-DO information sharing pilot program, which addressed the operational as well as technical barriers to effective information sharing within CIA.[791] Such pilot programs, however, are of little use if the recommended protocols are not implemented across the board.

A separate, but related problem is the lack of a mechanism to ensure that information calling into question a prior piece of intelligence is swiftly communicated to those analysts (and policymakers) who received the intelligence. This problem was most acutely demonstrated in the case of the Iraqi National Congress source, in which Defense HUMINT failed to reissue the reporting (either with the fabrication notice or recall notice attached)—a failure that led analysts and senior policymakers to accept the reporting months after it was known to be worthless. Defense HUMINT has taken steps to ensure that fabricated reporting is recalled, and the Director of the CIA is currently working

to establish Community-wide standards to ensure that the original reporting, the fabrication notice, and the recalled reporting are electronically linked. It remains to be seen, however, whether the information-technology hurdles involved in linking related reporting can be overcome.

**Conclusion 20**

Relevant information known to intelligence analysts was not provided to Community collectors.

The systemic lack of effective information sharing occurs in the other direction as well, however. For example, the DO was not aware that the DI was relying so heavily on reporting from Curveball in its pre-war assessments of Iraq's BW program.[792] Similarly, although Defense HUMINT participated in the coordination sessions for Secretary Powell's speech, the Defense HUMINT participant said that he was not aware that the information being discussed came from the same Iraqi National Congress source who was known to be a fabricator.[793]

The National Intelligence Council has taken steps to address this problem. For example, the DO and Defense HUMINT will now directly participate in the NIE coordination process and will do so from the initial stages of that process, giving the collectors a better window into the sources relied upon and therefore an enhanced opportunity to bring to the fore any concerns about those sources. Also, a new National Intelligence Officer for "Intelligence Assurance" has been established to oversee these quality control measures.[794] Although it is still too early to tell, we hope that these steps address previous shortcomings in the NIE process.

**Conclusion 21**

Inability to obtain information from foreign liaison services hampered the Community's ability to assess the credibility of crucial information.

The information sharing problem is compounded with respect to foreign liaison. Although the Intelligence Community has been criticized for over-reliance on liaison sources,[795] such criticism is to some extent overstated.

Liaison reporting can play a valuable role in opening up avenues of collection the United States would not be able to approach on its own; indeed, at times it is the only information we have. The key to its usefulness, however, is the ability to assess its reliability. That determination hinges on several factors, including effective information sharing with the liaison service.

Information sharing between intelligence services is dependent upon many factors, including diplomatic and policy factors that are beyond the Intelligence Community's ability to control. Despite constant requests from the CIA, the handling foreign service refused to provide direct access to Curveball until spring of 2004, which seriously undermined the ability to determine his reliability. And in at least two instances—the inability of the Intelligence Community to learn the identity of the individual who provided the fourth BW source's information or the identity of the source of the corroborating information the liaison service claimed for the Niger deal—the foreign liaison services refused to share crucial information with the United States because of fear of leaks.[796] Until *that* systemic problem can be addressed, increased information sharing with liaison is unlikely to improve markedly. We discuss the issue of unauthorized disclosures in more detail and offer recommendations in Chapters Six (Leadership and Management) and Seven (Collection).

A cautionary note: the increased sharing of intelligence *reporting* among liaison services—without sharing the sourcing details or identity of the source—may lead to unwitting circular reporting. When several services unknowingly rely on the same sources and then share the intelligence production from those sources, the result can be false corroboration of the reporting. In fact, one reason for the apparent unanimity among Western intelligence services that Iraq posed a more serious WMD threat than proved to be the case was the extensive sharing of intelligence information, and even analysis, among liaison services. Such sharing of information, without sharing of source information, can result in "groupthink" on an international scale.

## Dissemination

The collection, analysis, and dissemination of finished intelligence is a cycle, and many of the issues related to collection and analysis also affect dissemination of the product. But at least one issue merits separate discussion. The

interface between the Intelligence Community and the policymaker—the way that intelligence analysis is conveyed to the consumer—needs reexamination.

### Conclusion 22

The President's Daily Brief likely conveyed a greater sense of certainty about analytic judgments than warranted.

As part of its investigation, this Commission was provided access, on a limited basis, to a number of articles from the President's Daily Brief (PDB) relating to Iraq's WMD programs. Although we saw only a limited cross-section of this product, we can make several observations about the art form. In short, many of the same problems that occurred with other intelligence products occurred with the PDBs, only in a magnified manner. For instance, the PDBs often failed to explain, or even signal, the uncertainties underlying their judgments. Information from a known fabricator was used in PDBs, despite the publication of a fabrication notice on that source months earlier. PDB articles discounted information that appeared to contradict the prevailing analytical view by characterizing, without justifications, such information as a "cover story" or purposeful deception. The PDBs attributed information to multiple sources without making clear that the information rested very heavily on only one of those sources. And the titles of PDB articles were sometimes more alarmist than the text would support.

In addition to the problems it shares with other intelligence products, the PDB format presents some unique problems as well. As discussed above, the emphasis on current intelligence can adversely affect the distribution of analytical resources and can reduce the level of expertise needed for contextual analysis. But the focus on current intelligence may also adversely affect the consumers of intelligence. In particular, the daily exposure to current intelligence products such as the PDB may create, over time, a greater perception of certainty about their judgments than is warranted. And the way these products are generated and disseminated may actually skew the way their content is perceived. For example, when senior policymakers are briefed with the President's Daily Brief or a similar product, they often levy follow-up questions on the briefer. The response to those questions is then typically disseminated in the same format. Therefore, if one policymaker has an intense interest in one area and actively seeks follow-up, that questioning can itself generate numer-

ous PDBs or Senior Executive Memoranda. A large volume of reporting on one topic can result, and that large volume may skew the sense among other policymakers as to the topic's importance.

**Conclusion 23**

The National Intelligence Estimate process is subject to flaws as well, and the Iraq NIE displays some of them. The length of the NIE encourages policymakers to rely on the less caveated Key Judgments. And the language of consensus ("most agencies believe") may obscure situations in which the dissenting agency has more expertise than the majority.

Long-term products such as the NIE bear reexamination as well. With respect to the October 2002 NIE on Iraq, some of the weaknesses in that product are attributable to anomalies in this particular NIE process, including the unusually short timeframe for publication (discussed further below), while others are attributable to inherent weaknesses in the NIE process itself.

One criticism of NIEs in general is that they are too long, read poorly, and are not popular with consumers.[797] The October 2002 NIE, at 90 pages, is almost twice as long as the average NIE.[798] One consequence of the length of the NIE—aside from discouraging its readers to look beyond the Key Judgments—is that its sheer heft suggests that there was a surfeit of evidence supporting those Key Judgments. That impression may encourage reliance on the Key Judgments alone. To the extent that intelligence judgments are often questions of degree (*e.g.*, the *likelihood* that an adversary has BW), however, short summaries and Key Judgments run a serious risk of misleading readers. Moreover, to the extent that daily intelligence products to senior policymakers may have conveyed a high level of confidence on Iraq WMD previous to the publication of the NIE, policymakers may have understood the confidence levels in the NIE to be higher than actually intended. At a minimum, therefore, NIEs must be carefully caveated and the degree of uncertainty in the judgments clearly communicated.

Another criticism of the NIE process is that it is inappropriately democratic—as the Assistant DCI for Analysis and Production described it, the "FBI has the same vote as the DOE" even when one agency clearly has greater expertise on the relevant subject matter.[799] The quest for consensus in NIEs—and

the democratic process applied to reach that consensus—can produce confusing results.

For example, on the question whether Iraq was reconstituting its nuclear program, the position of CIA and DIA (with NGA and NSA in agreement) was that the tubes were for use in centrifuges, and therefore that the procurement of these tubes, along with some other procurement activity, indicated that Iraq was reconstituting its nuclear weapons program. The position of CIA and DIA was that they would not have reached a judgment of reconstitution *without* the tubes. DOE, on the other hand, believed that the tubes were *not* for centrifuges but that the other activity was sufficient to conclude that Iraq was reconstituting. While it is true that CIA and DOE agreed on the ultimate conclusion—reconstitution was underway—their respective bases for that conclusion were fundamentally at odds. The "most agencies believe" formulation glossed over this fundamental problem. A straightforward presentation of each agency's views might have better exposed the logical incompatibility of the CIA and DOE positions.[800] Moreover, the "democratic" process diminished the weight of DOE's "expert" opinion on nuclear technology.

Finally, the Iraq story revealed another inherent weakness of the NIE. The Iraq NIE, we now know, relied to a large extent on unreliable human source reporting. Although there were many contributing factors to this problem, one significant failing was that those involved in the coordination process were not aware of the degree to which the BW assessments relied on a single source or that another source had already been deemed a fabricator. This problem is currently being addressed. Newly-instituted National Intelligence Council procedures require the collecting agency to review and verify the reliability of its sources used in the NIE.[801]

### Conclusion 24

The Iraq NIE was produced to meet a very short deadline. The time pressure was unfortunate and perhaps avoidable, but it did not substantially affect the judgments reached in the NIE.

To understand the unusual nature of the Iraq NIE process, it is necessary to understand how the National Intelligence Estimate process usually works. NIEs are produced under the auspices of the National Intelligence Council

and are the "Intelligence Community's most authoritative written judgments on national security issues."[802] NIEs are primarily "estimative," that is, they "make judgments about the likely course of future events and identify the implications for U.S. policy."[803] Because of this "estimative" quality, NIEs are generally produced over the course of several months.[804] In the usual process, an NIE is requested by the NIC or by senior policymakers. The first step after the NIE is requested and authorized is the preparation of the Terms of Reference, which define precisely the question the NIE will address.[805] The National Intelligence Officer with responsibility for that subject area will generally take responsibility for overseeing the research and drafting of the NIE and its coordination. The individual agencies will appoint senior-level officers to serve as representatives for coordination sessions. These representatives will not be the drafters of the NIE but will speak for their agencies at the coordination meetings.[806]

The drafting and coordination of a National Intelligence Estimate is an iterative process. After a draft NIE is produced and reviewed by the NIC, the draft is circulated to the individual agencies for review. Comments on the draft are discussed at the interagency coordination meetings and changes are incorporated. If consensus is not possible on certain points, the dissenting agency is free to draft a dissent for inclusion in the NIE. The coordinated draft is submitted to a panel of outside readers for their review.[807] The draft is then submitted to NIC management for review and approval.[808] The final step is review and approval by the National Foreign Intelligence Board, which is chaired by the Director of the CIA.[809] Substantive changes occasionally are made to the NIE at this level.[810]

Once a draft is written, the review and coordination process alone takes at least one month, according to the NIO for Strategic and Nuclear Programs. Therefore, the NIO noted that a normal timeframe to draft, coordinate, and disseminate an NIE on a topic such as Iraq's WMD programs would be "several" months.[811]

The October 2002 NIE on Iraq, however, was requested on September 9, 2002, in a letter from Senator Richard Durbin of the Senate Select Committee on Intelligence (SSCI), for publication within three weeks.[812] This short deadline significantly truncated the usual NIE process. Although the NIOs and the working-level analysts involved in drafting the NIE agree that this short time frame probably did not affect the overall judgments in the NIE, the

rushed schedule had consequences that may have affected the quality of the product.[813]

One consequence was that the Joint Atomic Energy Intelligence Committee (JAEIC), which often provides "expert" input on estimates involving nuclear issues, did not convene an interagency meeting to discuss the dispute over the aluminum tubes in the weeks immediately preceding the NIE coordination sessions, despite several attempts to do so.[814] Whether input from the JAEIC would have altered the judgments in the NIE is of course an open question. The opportunity for the JAEIC to review the points of contention between the CIA and DOE on the aluminum tubes, however, may have at a minimum resulted in a clearer exposition of that debate. The short timeframe may also have compromised the quality of the overall exchange of views during the coordination process. Normally, there might be several rounds of coordination at the interagency level. In the October 2002 NIE, however, there was one marathon coordination session. According to one DOE analyst who attended the coordination meeting, the short deadline reduced the chances that the various agencies could succeed in harmonizing their positions.[815]

The Intelligence Community might well have avoided the need to produce the NIE in such a short timeframe, however. On July 22, 2002, the Chairman of the Senate Select Committee on Intelligence sent a letter to DCI Tenet requesting that the NIC prepare a National Intelligence Estimate on covert action, to include an assessment of Iraq's WMD efforts. The CIA's Office of Congressional Affairs, however, did not pass this request to the NIOs responsible for global WMD activities. According to the NIO for Strategic and Nuclear Programs, the SSCI was informed orally that covert action activities were not a proper subject for NIEs and that such an NIE would not be prepared.[816] A formal response was not sent to the SSCI until September 25, 2002, at which time the DCI reiterated this position but also added that he had "directed the preparation of a new NIE on Iraq's weapons of mass destruction" in response to the September 9, 2002 request from Senator Durbin. The NIO for Strategic and Nuclear Programs noted that if he had been alerted in July about the Senate Select Committee's interest in an NIE on Iraq's weapons of mass destruction, he could have started the process at that point and avoided much unnecessary time pressure.[817]

Another anomaly in the October 2002 NIE process contributed to some of the inconsistencies between the text of the NIE on the one hand and the Key

Judgments and the unclassified NIE on the other. According to the NIO for Strategic and Nuclear Programs, under normal procedures the National Intelligence Council prepares the classified NIE and then derives the unclassified summary from that NIE. In the case of Iraq, however, the NIC accepted an assignment from the White House in May 2002 to prepare an unclassified "White Paper" on Iraq WMD, without first preparing a classified NIE.[818] When the Senate requested a classified NIE (and an unclassified version of the NIE) in September 2002, the NIO noted that the National Intelligence Council should have then folded the "White Paper" project into the NIE project, by deriving the unclassified product from the classified version. The two projects continued on parallel tracks, however. Accordingly, when attempts were later made to harmonize the two papers, caveats such as "we assess" were dropped from the Key Judgments, communicating a greater sense of certainty than was warranted.[819]

In short, the inherent flaws in the NIE process were compounded in this situation by the particular circumstances surrounding production of the Iraq NIE.

### Conclusion 25

The shortened NIE coordination process did not unfairly suppress the National Ground Intelligence Center's slightly more cautious estimates of Iraq's CW stockpile.

Though the National Intelligence Estimate process in general, and the 2002 Iraq NIE process in particular, suffer from numerous flaws, in this case that process was not responsible for unduly suppressing agency views, as some have suggested. At least two analysts from one agency—NGIC—believe that NGIC's views on Iraq's CW program were not accurately represented in the October 2002 NIE.[820] These two NGIC analysts expressed the belief that this omission was not inadvertent but was consciously and unfairly omitted by the NIO for Strategic and Nuclear Programs.[821] While we have much to criticize about the NIE process, this is not one of them and is not supported by the facts.

According to the NGIC analysts, NGIC disagreed with the NIE's assessment that Iraq had restarted CW production and therefore could have increased its stockpiles to between 100 and 500 metric tons.[822] NGIC believed that Iraq's

stockpiles therefore remained within the previously assessed 10 to 100 metric ton range.[823] Yet, apparently to NGIC's dismay, the 100 to 500 metric tons figure was eventually published in the NIE without an indication that NGIC disagreed with the Estimate's conclusions about Iraq's CW production and existing CW stockpiles.[824]

NGIC's claim that its dissenting views were purposefully suppressed by the NIO is not, however, borne out by the facts. According to NGIC's line edits on the NIE draft, NGIC did indeed suggest softening the language in some places—for example, to say that Iraq had begun production of mustard agent and *possibly* nerve agents, and to say that Iraq was *attempting* to procure various chemicals and equipment covertly. NGIC also suggested that, rather than saying that Iraq had *as much as* 500 metric tons of CW stockpiled, the NIE should say that Iraq had *up to* 500 metric tons stockpiled.[825] Even accepting that these views represented a meaningful dissenting position, NGIC's views were not purposefully suppressed. NGIC had several opportunities to make its dissent known (through DIA), including at the NIE coordination meeting on September 25, 2002; on a number of drafts of the NIE; or at the Military Intelligence Board meeting on September 30, 2002.[826] If NGIC (or DIA, as NGIC's representative) had wanted to insert a footnote reflecting a different view, it had the opportunity to do so at that point. Yet it did not.

In fact, DIA concurred with the language in the NIE regarding the size of Iraq's CW stockpile because the language "was sufficiently caveated to indicate DIA's uncertainty in the size of the stockpile."[827] Nor did NGIC subsequently take the opportunity between the NIE and the opening of the war to publish its dissenting view in finished intelligence.[828]

In sum, the National Ground Intelligence Center's serious accusation that its views on Iraq's CW program were purposefully excluded from the NIE is not supported by the available evidence.

## Politicization

Many observers of the Intelligence Community have expressed concern that Intelligence Community judgments concerning Iraq's purported WMD programs may have been warped by inappropriate political pressure.[829] To discuss whether those judgments were "politicized," that term must first be defined.

**Conclusion 26**

The Intelligence Community did not make or change any analytic judgments in response to political pressure to reach a particular conclusion, but the pervasive conventional wisdom that Saddam retained WMD affected the analytic process. [830]

The Commission has found no evidence of "politicization" of the Intelligence Community's assessments concerning Iraq's reported WMD programs. No analytical judgments were changed in response to political pressure to reach a particular conclusion.[831] The Commission has investigated this issue closely, querying in detail those analysts involved in formulating pre-war judgments about Iraq's WMD programs.

These analysts universally assert that in no instance did political pressure cause them to change any of their analytical judgments. Indeed, these analysts reiterated their strong belief in the validity and soundness of their pre-war judgments at the time they were made.[832] As a former Assistant Secretary of State for Intelligence and Research put it, "policymakers never once applied any pressure on coming up with the 'right' answer on Iraq."[833] Moreover, the CIA's Ombudsman for Politicization conducted a formal inquiry in November 2003 into the possibility of "politicization" with respect to assessments of Iraqi WMD. That inquiry involved the (perceived) delay in CIA's reassessment of its position on WMD in Iraq. The Ombudsman also found no evidence, based on numerous confidential interviews with the analysts involved, that political pressure had caused any analyst to change any judgments.[834]

The Commission also found no evidence of "politicization" even under the broader definition used by the CIA's Ombudsman for Politicization, which is not limited solely to the case in which a policymaker applies overt pressure on an analyst to change an assessment. The definition adopted by the CIA is broader, and includes any "unprofessional manipulation of information and judgments" by intelligence officers to please what those officers perceive to be policymakers' preferences.[835] But the definition retains the idea that circumstantial pressure to produce analysis quickly is not politicization—there must be some skewing of analytical judgments, either deliberately or unintentionally.[836] The Ombudsman noted that in his view, analysts

on Iraq worked under more "pressure" than any other analysts in CIA's history, in terms of their being required to produce so much, for so long, for such senior decisionmakers. But that circumstantial pressure did not cause analysts to alter or skew their judgments.[837] We have found no evidence to dispute that conclusion.

There is also the issue of interaction between policymakers and other customers on the one hand and analysts on the other.[838] According to some analysts, senior decisionmakers continually probed to assess the strength of the Intelligence Community's analysis, but did not press for changes in the Intelligence Community's analytical judgments. We conclude that good-faith efforts by intelligence consumers to understand the bases for analytic judgments, far from constituting "politicization," are entirely legitimate. This is the case even if policymakers raise questions because they do not like the conclusions or are seeking evidence to support policy preferences. Those who must use intelligence are entitled to insist that they be fully informed as to both the evidence and the analysis.

Nor is pressure to work more quickly than is ideal or normal "politicization." Iraq WMD analysts insisted to Commission staff that they faced tremendous pressure to produce finished intelligence and to respond promptly to policymakers' questions, but that such "pressure" was generated by time and analytical resource limitations, not by efforts to alter the analysts' judgments. And according to the National Intelligence Officers responsible for drafting the NIE on Iraq WMD in the fall of 2002, there was no communication with policymakers about the Estimate's conclusions beyond pressure to complete the paper within a short three-week timeframe.[839] Furthermore, all of the Iraqi WMD analysts interviewed by the Commission staff stated that they reached their conclusions about Iraq's pursuit of WMD independently of policymaker pressure, based on the evidence at hand.[840] In fact, given the body of evidence available, many analysts have said that they could not see how they could have reached any other conclusions about Iraq's WMD programs.[841]

However, there is no doubt that analysts operated in an environment shaped by intense policymaker interest in Iraq. Moreover, that analysis was shaped—and distorted—by the widely shared (and not unreasonable) assumption, based on his past conduct and non-cooperation with the United Nations, that Saddam retained WMD stockpiles and programs. This strongly-held assumption contributed to a climate in which the Intelligence Community was too

willing to accept dubious information as providing confirmation of that assumption. Neither analysts nor users were sufficiently open to being told that affirmative, specific evidence to support the assumption was, at best, uncertain in content or reliability.

Some analysts were affected by this "conventional wisdom" and the sense that challenges to it—or even refusals to find its confirmation—would not be welcome. For example, the National Intelligence Officer for Near East and South Asia described a "*zeitgeist*" or general "climate" of policymaker focus on Iraq's WMD that permeated the analytical atmosphere.[842] This "climate" was formed in part, the NIO claimed, by the gathering conviction among analysts that war with Iraq was inevitable by the time the NIE was being prepared.[843] But this "*zeitgeist*," he maintained, did not dictate the prevailing analytical view that Iraq had CW and BW and was reconstituting its nuclear program—in fact, the NIO said he did not see how analysts could have come up with a different conclusion about Iraq's WMD based on the intelligence available at the time.[844] Similarly, the DOE analysts who participated in the NIE coordination meeting stated that there was no political pressure on DOE, direct or indirect, to agree with the NIE's conclusion that Iraq was "reconstituting" its nuclear program. At the same time, however, he said that "DOE did not want to come out before the war and say [Iraq] wasn't reconstituting."[845]

Even in the absence of politicization, distortion can creep into the analytical product, not only through poor tradecraft, but through poor management and reliance on conventional wisdom. The general assumption that Saddam retained WMD and the backdrop of impending war, particularly in the wake of September 11, affected the way analysts approached their task of predicting the threat posed by Iraq's WMD programs. For example, this atmosphere contributed to analysts' use of a worst-case-scenario or heightened-burden-of-proof approach to analysis. This overall climate, we believe, contributed to the too-ready willingness to accept dubious information as supporting the conventional wisdom and to an unwillingness even to consider the possibility that the conventional wisdom was wrong.

But while some of the poor analytical tradecraft in the pre-war assessments was influenced by this climate of impending war, we have found no evidence to dispute that it was, as the analysts assert, their own independent judg-

ments—flawed though they were—that led them to the conclusion that Iraq had active WMD programs.

As described above, the pre-war assessments of Iraq's WMD programs suffered from numerous other analytical failures. Primary among those analytical flaws was a failure to question assumptions or to keep an open mind about the significance of new data. Such failures are more likely if management within the Intelligence Community does not foster, or at least tolerate, dissenting views. Yet one systemic problem within the Intelligence Community works to frustrate expressions of dissent. As the former Assistant Secretary of State for Intelligence and Research described the problem, the senior leadership of the Intelligence Community is faced with an inevitable conundrum—the head of the Intelligence Community must be close to the President in order for the intelligence product to have relevance, but such closeness also risks the loss of objectivity.[846] When this balance tips too far toward the desire for the Intelligence Community to be "part of the [Administration] team," analysts may be dissuaded from offering dissenting opinions.[847]

The failure to pursue alternative views in forming the pre-war assessments of Iraq's WMD, however, was likely due less to the political climate than to poor analytical tradecraft, a failure of management to actively foster opposition views, and the natural bureaucratic inertia toward consensus. In the case of pre-war assessments of Iraqi WMD, working-level WINPAC analysts described an environment in which managers rewarded judgments that fit the consensus view that Iraq had active WMD programs and discouraged those that did not.[848] To the degree that analysts judged—as we believe some of them did—that "non-consensus" conclusions would not be welcomed, vigorous debate in the analytic process was made much more difficult.

Yet these analysts insisted that they genuinely believed that consensus view, based on the evidence at hand, and we have found no evidence that this was not the case. Moreover, to the extent management at CIA or elsewhere in the government created a climate of conformity, it was not unique to the Iraq situation. For example, an employee survey in April 2004 revealed that 17 percent of WINPAC analysts said they worked "in an atmosphere in which some managers who hold strong views make it difficult to publish opposing points of

views."[849] In surveys of the CIA's Directorate of Intelligence as a whole, however, 23 percent reported working in such an environment.[850]

**Conclusion 27**

The CIA took too long to admit error in Iraq, and its Weapons Intelligence, Nonproliferation, and Arms Control Center actively discouraged analysts from investigating errors.

A related problem is bureaucratic resistance to admitting error. Just as the Intelligence Community has an obligation to consumers to provide unvarnished intelligence assessments that are free from politicization, the Community also has an obligation to inform consumers when it learns that information on which previous judgments were based is unreliable. The Iraq experience demonstrates that the Intelligence Community is reluctant to confess error, and is even reluctant to encourage the pursuit of information that may reveal such error. In this respect, the infamous case of Curveball offers an excellent example.

After the initial phase of the war, two WINPAC analysts who had traveled to Iraq began to have doubts about the foundation of their assessments, particularly the BW assessments. Yet CIA management was resistant to this new information.[851] The reaction of CIA management in this instance demonstrates at best a lack of encouragement for dissenting views. As described above, when analysts traveled to Iraq in the summer and fall of 2003 and began to investigate Curveball's bona fides, serious doubts arose about his truthfulness. The WINPAC BW analyst who had conducted the investigations in Iraq brought his concerns to WINPAC management. He argued that Curveball was a fabricator because he had lied about his access (in particular covering up that he had actually been fired from his government job in 1995), lied about being present during a BW accident when he had actually been out of the country at that time, and lied about the purpose for the trailers found by Coalition forces.[852] According to the analyst, however, management was hostile to the idea of publishing a reassessment or retreating from Curveball's information, since other analysts still believed in his veracity.

By January 2004, however, travel records confirmed that Curveball had not even been in Iraq during the time he claimed to have been present at a BW

facility, and this discrepancy convinced most analysts that Curveball was a fabricator. By March 2004, when CIA was able to interview Curveball and he could not explain imagery that contradicted his reporting, "any remaining doubts" about Curveball's reliability were removed, according to the former WINPAC BW analyst.[853]

CIA management, however, was still reluctant to "go down the road" of admitting that Curveball was a fabricator. According to the former WINPAC analyst, Directorate of Intelligence management was slow in retreating from Curveball's information because of concerns about how this would look to the "Seventh Floor" and to "downtown." When Curveball's reporting was finally recalled in May 2004, the CIA alerted senior policymakers to that fact, but CIA did not publish a reassessment of its position on Iraq's BW program.[854]

As noted, the CIA's Inspector General, in a review of WINPAC's performance finished in November 2004, concluded that "the process [of retreating from intelligence products derived from Curveball reporting] was drawn out principally due to three factors: (1) senior managers were determined to let the ISG in Iraq complete its work before correcting the mobile labs analysts; (2) the CIA was in the midst of [trying] to gain direct access to Curveball; and (3) WINPAC Biological and Chemical Group (BCG) management was struggling to reconcile strong differences among their BW analysts."[855] The report went on to say that senior managers did not want to disavow Curveball only to find that his story stood up upon direct examination or to find that "the ISG uncovered further evidence that would require additional adjustments to the story."[856]

But CIA had gained direct access to Curveball in March 2004 and his reporting had been recalled in May 2004. After May 2004, therefore, two of the Inspector General's reasons were no longer valid, and the third—waiting for the Iraq Survey Group report—would delay any reassessment for six months *after* the Intelligence Community had already conceded that the primary source for its pre-war BW assessment had fabricated his reporting. In any event, as of March 2005 WINPAC has still not published a reassessment of Iraq's BW program.

Moreover, the analysts who raised concerns about the need for reassessments were not rewarded for having done so but were instead forced to leave WINPAC.[857] One analyst, after presenting his case in late 2003 that Curveball had

fabricated his reporting, was "read the riot act" by his office director, who accused him of "making waves" and being "biased."[858] The analyst told Commission staff that he was subsequently asked to leave WINPAC. Similarly, a WINPAC CW analyst who pressed to publish a reassessment of Iraq's CW program in late 2003 was also, according to the analysts, "told to leave" WINPAC.[859] Although managers must be able to overrule subordinates once an issue has been debated, managers must also create an atmosphere in which such debate is encouraged rather than punished.[860]

In sum, there was no "politicization" of the intelligence product on Iraq. Poor tradecraft, exacerbated by poor management, contributed to the erroneous assessments of Iraq's WMD programs. These problems were further exacerbated by the reluctance of Intelligence Community management to foster and consider dissenting views. Finally, the Intelligence Community was unwilling to identify the errors underlying its intelligence assessments, admit those errors, and explain to consumers how those errors affected previous judgments.

## Accountability

### Recommendation

The Director of National Intelligence should hold accountable the organizations that contributed to the flawed assessments of Iraq's WMD programs.

Numerous failures within the Intelligence Community contributed to the flawed estimates on Iraq. Many of these failures are systemic—flaws in the way the Intelligence Community is managed, organized, and structured. Part Two of this report contains dozens of recommendations for systemic reform based on the lessons learned from Iraq and other case studies. But reform requires more than changing the Community's systems; it also requires accountability.

***Individuals.*** There are unfortunately a number of examples in the Iraq assessments of individuals whose conduct fell short of what the Intelligence Community has a right to expect. Among these is the handling of Curveball's reporting on mobile BW. In late January of 2003, the Secretary of State was engaged in an intense personal effort to explore every flaw in the intelligence he was about to present to the United Nations Security Council. By then, a division in the CIA's Directorate of Operations had spent months pointing out

Curveball's flaws with some persistence. Yet the Secretary of State never learned of those doubts.

A number of individuals stood between the two and could have made the connection. Some acknowledge knowing about Curveball's problems but did not understand that he was the key to the entire BW assessment. Others knew how central Curveball was to the BW case but deny knowing about Curveball's problems. Still others—particularly in CIA's WINPAC—were aware of both sides of the issue and did not present the doubts to the Secretary or other policymakers. Finally, the most senior officials of the Agency insist the serious concerns expressed about Curveball's reliability were never conveyed to them—despite assertions to the contrary.

This Commission was not established to adjudicate personal responsibility for the intelligence errors on Iraq. We are not an adjudicatory body, nor did we take testimony under oath. We were not authorized or equipped to assign blame to specific individuals, particularly when there are disputes about critical facts. We are, however, equipped to address the question of *organizational* accountability.

***Organizations.*** Almost every organization in the Intelligence Community—collectors, analysts, and management—performed poorly on Iraq. But there are differences among the agencies, both in their initial performance and in how they responded when their mistakes became clear. The National Intelligence Council, for example, faltered badly in producing the flawed NIE on Iraq's WMD programs. But it also learned from its errors. It now brings the collection agencies into the NIE process to evaluate their sources, and its recent estimates are more candid about intelligence gaps, weak sources, and divergent viewpoints.

For some organizations, however, problems run deeper. Three agencies made such serious errors, or resisted admitting their errors so stubbornly, that questions may fairly be raised about the fundamental culture or capabilities of the organizations themselves.

1. The performance of the National Ground Intelligence Center (NGIC) in assessing the aluminum tubes was a gross failure. NGIC got completely wrong the question of the tubes' suitability for conventional rockets—a question that is at the core of NGIC's assigned area of exper-

tise. And NGIC was not aware of, and did not pursue, basic information that was critical to its assessments.[861]

2. The Defense HUMINT Service inexcusably failed to recall reporting from a known fabricator, and compounded that error by failing to notice when its discredited reporting crept into Secretary Powell's speech. Defense HUMINT also bears heavy responsibility for the Curveball episode. Defense HUMINT disseminated Curveball's reporting while taking little or no responsibility for checking the accuracy of his reports. In fact, Defense HUMINT still calls itself merely a "conduit" for Curveball's information and resists the idea that it had any real responsibility to vet his veracity.[862]

3. CIA's Weapons Intelligence, Nonproliferation, and Arms Control Center (WINPAC) is the Intelligence Community's center for all-source analysis on weapons of mass destruction. As such, it was at the heart of many of the errors discussed earlier, from the mobile BW case to the aluminum tubes. Just as bad, some WINPAC analysts—and WINPAC as an institution—showed great reluctance to correct these errors, even long after they had become obvious.[863] Creating an intelligence center always carries some risk that alternative views will be sacrificed in pursuit of consensus, and we fear that a culture of enforced consensus has infected WINPAC as an organization.

In short, we have doubts that the broad reforms described in Part Two will be enough to change the organizational culture of NGIC, Defense HUMINT, and WINPAC. Yet the cultures of each contributed crucially to the Iraq WMD debacle. We therefore recommend that the Director of National Intelligence give serious consideration to whether each of these organizations should be reconstituted, substantially reorganized, or made subject to detailed oversight.

# ENDNOTES

[1] NIEs, produced under the auspices of the National Intelligence Council (NIC), contain the coordinated judgments of the Intelligence Community and are the DCI's most authoritative written judgments concerning national security issues. CIA website, http://www.cia.gov.nic/NIC_about/html.

[2] Executive Order 13328, which established this Commission, did not authorize us to investigate how policymakers used the intelligence they received from the Intelligence Community on Iraq's weapons programs. As a result, while we interviewed several policymakers, the purpose of those interviews was to obtain information about how the Intelligence Community reached and communicated its judgments about Iraq's weapons programs, and not to review policymakers' use of intelligence information.

[3] NIC, National Intelligence Estimate, *Iraq's Continuing Programs for Weapons of Mass Destruction* (NIE 2002-16HC) (Oct. 2002) (hereinafter "NIE") at pp. 5, 6. The Intelligence Community is composed of the Central Intelligence Agency (CIA), the Department of State's Bureau of Intelligence and Research (INR), the Department of Energy (DOE), the Department of the Treasury, the Federal Bureau of Investigation (FBI), the Department of Homeland Security (DHS), the National Reconnaissance Office (NRO), the National Security Agency (NSA), the National Geospatial-Intelligence Agency (NGA), the Defense Intelligence Agency (DIA), and Army Intelligence, Navy Intelligence, Coast Guard Intelligence, Air Force Intelligence, and Marine Corps Intelligence. Not all of these elements coordinate on all NIEs, however. The October 2002 NIE on Iraq WMD was coordinated among CIA, INR, DOE, NSA, NGA (then known as the National Imagery and Mapping Agency (NIMA)), DIA, and all the military intelligence components. NIC, *How the Intelligence Community Arrived at the Judgments in the October 2002 NIE on Iraq's WMD Programs* (March 2004) (hereinafter "DCI Statement for the Record") at Introduction, p. 1 n. 1. This was the DCI's Statement for the Record prepared by the NIC and approved by the principals of the National Foreign Intelligence Board. The assessment that Iraq was reconstituting was expressed as the view of "most agencies" to reflect that INR, among the agencies coordinating on the NIE, did not agree with that assessment. Interview with National Intelligence Officer for Strategic and Nuclear Programs (hereinafter "NIO/SNP") (Sept. 20, 2004).

[4] *Id.* at p. 16. Although DOE agreed that Iraq was reconstituting its nuclear program, it based that conclusion on factors other than the aluminum tubes. DOE assessed that the tubes were more likely for use in tactical rockets, a view adopted by INR. The details of the discussion are addressed further below.

[5] NIE at p. 9.

[6] Iraq Survey Group (ISG), *Comprehensive Report of the Special Advisor to the DCI on Iraqi WMD*, Volume II, "Nuclear" (Sept. 30, 2004) at p. 7 (hereinafter "ISG Report, Nuclear").

[7] *Id.* at pp. 1, 7, 8.

[8] *Id.* at p. 21.

[9] DCI Statement for the Record at Tab 1, p. 4.

[10] *Id.* at p. 7.

[11] *Id.* at p. 4 (citing November 1990 study by the Joint Atomic Energy Intelligence Committee).

[12] *Id.* at p. 7. Iraq had pursued multiple uranium enrichment technologies, including a centrifuge program and the outdated Electromagnetic Isotope Separation (EMIS) process, before the Gulf War. *Id.* at pp. 7, 11.

[13] *Id.* at pp. 7-8.

[14] Joint Atomic Energy Intelligence Committee (JAEIC), *Iraq's Nuclear Weapons Program: Elements of Reconstitution* (JAEIC 94-004) (Sept. 1994) at p. v. The JAEIC is a DCI committee charged with analyzing technical nuclear issues. DCI Statement for the Record at Tab 1, p. 4.

[15] DCI Statement for the Record at Tab 1, p. 9.

[16] *Id.*

[17] *See, e.g.*, CIA, *Iraq: WMD Programs: The Road to Reconstruction* (OSWR) (Feb. 3, 1995).

[18] JAEIC, *Reconstitution of Iraq's Nuclear Weapons Program: An Update* (JAEIC 97-004) (Oct. 1997); *see also* DCI Statement for the Record at Tab 1, p. 14.

[19] JAEIC, *Reconstitution of Iraq's Nuclear Weapons Program: An Update* (JAEIC 97-004) (Oct. 1997) at p. iii.

[20] NIC, *Current Iraqi WMD Capabilities* (NICM 1848-98) (Oct. 1998) at p. 2.

[21] *Id.*

[22] JAEIC, *Reconstitution of Iraq's Nuclear Weapons Program: Post Desert Fox* (JAEIC 99-003) (June 1999); *see also* DCI Statement for the Record at Tab 1, p. 17.

[23] NIC, *Iraq: Steadily Pursuing WMD Capabilities* (ICA 2000-007 HCX) (Dec. 2000) at pp. 7-8.

[24] Classified intelligence report (March 2001); *see also* DCI Statement for the Record at Tab 1, pp. 18-19.

[25] NIE at p. 75 (tubes seized in June 2001); *see also* DCI Statement for the Record at Tab 1, p. 19.

[26] Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004). Iraq was prohibited from possessing tubes composed of 7075 T6 aluminum alloy with outer diameters exceeding 75mm under Annex III to United Nations Security Council Resolution 687 because of their potential use in gas centrifuges. DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at pp. 7-8. In the gas centrifuge process, a feed of uranium hexafluoride ($UF_6$) gas is enriched in a rapidly spinning rotor within a vacuum chamber. The uranium isotopes are separated by the combined effects of centrifugal force and countercurrent circulation; as the rotor spins, the heavier isotopes are concentrated preferentially at the rotor's wall and are then convected upwards, where they can be scooped out. To be able to spin at such high-speeds, the rotors must be constructed from high-strength material, such as carbon-fiber, maraging steel, or high-strength aluminum such as the 7075 T6 alloy. U.S. Congress, Office of Technology Assessment, *Technologies Underlying Weapons of Mass Destruction* (OTA-BP-ISC-115) (1993).

[27] *See, e.g.*, CIA, *Iraq's Current Nuclear Capabilities* (June 20, 2001) (noting that although the tubes are "more consistent" with a centrifuge application, "we are also considering non-nuclear applications for the tubes"); Senior Executive Memorandum, *What We Knew About Iraq's Centrifuge-Based Uranium Enrichment Program Before and After the Gulf War* (Nov. 24, 2001) (noting that there are "divergent views" about the intended use of the tubes).

[28] *See, e.g.,* Senior Executive Memorandum, *The Iraqi Threat* (Dec. 15, 2001) ("[W]e believe a shipment of...tubes...[are] destined for use in Iraqi gas centrifuges."); Senior Publish When Ready, Title Classified (June 30, 2001) (noting that Iraq is likely to argue that the tubes are for conventional or civilian use, a use "that cannot be discounted," but also noting that the specifications for the tubes "far exceed any known conventional weapons application, including rocket motor casings for 81mm" MRLs).

[29] *See, e.g.,* Senior Executive Memorandum, *The Status of Iraq's Nuclear Program* (Jan. 11, 2002) (noting that the "Intelligence Community has less access to Saddam's nuclear intent and activities today than before the Gulf War").

[30] Electronic mail from NGIC to WINPAC (Aug. 13, 2001); Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004) (describing assessment provided by NGIC to CIA/DI analysts in November 2001; the CIA Iraq WMD Review Group was an entity established within CIA in August 2003 to provide an evaluation to the DCI of the pre-war intelligence assessments of Iraq's WMD programs). NGIC's assessment was shortly thereafter incorporated into a DIA Military Intelligence Digest supplement. *See* DIA, Military Intelligence Digest Supplement, *Iraq: Procuring Possible Nuclear-Related Gas Centrifuge Equipment* (MID-227-01-SCI) (Nov. 30, 2001).

[31] Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004).

[32] DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001). Although DOE judged that the dimensions and specifications of the tubes were not well suited for centrifuge use, DOE stressed that "none of the factors" that led to that conclusion "precluded Iraq's use (or, at a minimum, attempted use) of the tubes for centrifuge rotor manufacture." Among these factors, DOE noted that the inside diameter and wall thickness were not favorable for use as centrifuge rotors. At the same time, DOE noted that the dimensions of the tubes precisely matched those of Iraq's Nasser-81 mm rockets. *Id.* at pp. 8-9; *see also* DOE, Daily Intelligence Highlight, *Iraq: High Strength Aluminum Tube Procurement* (April 11, 2001) (tubes "could be used to manufacture gas centrifuge rotor cylinders for uranium enrichment" but the tubes "more likely" are intended to support a different application, such as rocket casings).

[33] Department of State, UNVIE Vienna 001337 (July 27, 2001) (cable from the U.S. Mission to the United Nations in Vienna describing IAEA conclusions regarding the aluminum tubes); *see also* UNVIE Vienna 001134 (July 25, 2002) (reiterating previous assessment).

[34] Senior Executive Memorandum, *The Iraq Threat* (Dec. 15, 2001).

[35] Senior Executive Memorandum, *What We Knew About Iraq's Centrifuge-Based Uranium Enrichment Program Before and After the Gulf War* (Nov. 24, 2001); Senior Executive Memorandum, *The Iraq Threat* (Dec. 15, 2001); DCI Statement for the Record at Tab 1, p. 19. As noted, while DOE believed the tubes were not "well-suited" for centrifuge applications, they "could be used" for that purpose. DOE, Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 4, and DOE Daily Intelligence Highlight, *Iraq: High Strength Aluminum Tube Procurement* (April 11, 2001) at p. 1. Although DOE assessed that the tubes' dimensions were not "favorable" for centrifuge use, it noted that the tubes "could be modified" for that use. DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at pp. 8-9; DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Recent Aluminum Tube Procurement Efforts* (TIN 000108) (Sept. 13,

2002) at p. 1; DOE, Daily Intelligence Highlight, *Iraq: Gas Centrifuge Program Recounted* (Nov. 8, 2002) at p. 1 (noting that "DOE continues to assess that the high-strength aluminum tubes Iraq has been attempting to acquire... could be modified for centrifuge use but that the more likely end-use is the fabrication of motor cases for tactical rockets").

[36] DCI Statement for the Record at Tab 1, p. 19.

[37] Classified intelligence report (noting that a front company had received the specification for a vertical spin testing machine from an individual believed to be in Iraq); *see also* DCI Statement for the Record at Tab 1, pp. 21-22 (noting reporting indicating that Iraq was making efforts to preserve its cadre of weapons personnel, and imagery reporting of construction at Al-Tahadi, where analysts thought a magnet production line was to be built).

[38] DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at pp. 4, 8-9; DOE, Daily Intelligence Highlight, *Iraq: High Strength Aluminum Tube Procurement* (April 11, 2001) at p. 1; DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Recent Aluminum Tube Procurement Efforts* (TIN 000108) (Sept. 13, 2002) at p. 1; DOE, Daily Intelligence Highlight, *Iraq: Gas Centrifuge Program Recounted* (Nov. 8, 2002) at p. 1 (noting that "DOE continues to assess that the high-strength aluminum tubes Iraq has been attempting to acquire... could be modified for centrifuge use but that the more likely end-use is the fabrication of motor cases for tactical rockets").

[39] DCI Statement for the Record at Tab 1 at p. 22. DOE was also becoming concerned that this activity could indicate "preliminary steps" to support a "gas centrifuge program restart." DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001).

[40] Senior Executive Memorandum, *The Status of Iraq's Nuclear Program* (Jan. 11, 2002) ("[T]he recent aluminum tube procurement effort, which CIA assesses to be an integral part of Iraq's centrifuge program"); Senior Executive Memorandum, *The Status of Iraq's Uranium Enrichment Program* (March 12, 2002) (the tubes are "suitable" for use as gas centrifuges); CIA, *Iraq: Expanding WMD Capabilities Pose Growing Threat* (Aug. 1, 2002) (the tubes are "best suited for use" in a gas centrifuge; text box indicates CIA considered other uses, but does not describe other agencies' views); Senior Executive Memorandum, *Details About Our Assessments on Iraq's Nuclear Program Since 1991* (Sept. 16, 2002) ("Reporting on Iraq's persistent interest in high-strength aluminum tubes—complemented by magnet production and machine tool and balancing machine procurement efforts—is key to our current assessment that Baghdad is reconstituting its centrifuge program."); Senior Executive Memorandum, *Questionable Dual-Use Items That Countries Have Sold to Iraq in the Past Five Years* (Sept. 27, 2002) (listing of dual-use items lists application of aluminum tubes as "rockets/nuclear applications" but assessment is that the tubes are "destined for use" in a uranium enrichment program). *See also* CIA, Talking Points prepared for the Deputy DCI for a Principals Committee Meeting on Iraq WMD (Aug. 28, 2002) (noting tubes are "destined for a gas centrifuge program" and their procurement shows "clear intent to produce weapons-capable fissile material") (described in Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004)).

[41] CIA, *Iraq's Hunt for Aluminum Tubes: Evidence of a Renewed Uranium Enrichment Program* (WINPAC IA 2002-051HCX) (Sept. 30, 2002) at pp. i, 1.

[42] *Id.* at pp. 3, 7.

[43] DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Recent Aluminum Tube*

*Procurement Efforts* (TIN 000108) (Sept. 13, 2002) at p. 1. During this timeframe, the Intelligence Community briefed the relevant congressional committees on the aluminum tubes issue, with DOE, INR, and CIA presenting their respective views. Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004).

[44] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004) (citing testimony of INR in Intelligence Community briefing to the Senate Select Committee on Intelligence on Sept. 17, 2002).

[45] NIE at p. 16.

[46] *Id.* at pp. 14, 16; NIC, President's Summary, NIE, *Iraq's Continuing Programs for Weapons of Mass Destruction* (PS/NIE 2002-16HC) (Oct. 2002).

[47] DCI Statement for the Record at Tab 1, p. 23; *see also* Interview with NIO/SNP (Sept. 20, 2004). Although the NIE does use the phrase "has reconstituted" on page 16, the NIE also more accurately reflects the idea that reconstitution is a process elsewhere in the draft. NIE at p. 16 ("reconstitution is underway").

[48] NIE at p. 16; Interview with NIO/SNP (Sept. 20, 2004).

[49] NIE at p. 17. The NIE also drew support for its conclusion that the tubes were destined for a nuclear program from indications that Saddam Hussein was "personally interested in the procurement of aluminum tubes." *Id.* at p. 16. The NIE relied for this point on one human intelligence report from a liaison service, which reported that Saddam was "closely following" the purchase of the tubes. Classified intelligence report and cable traffic (Sept. 2002). According to the relevant station, however, it was the intelligence officer who said Saddam was following the purchase. At least one CIA officer at the meeting, however, remembered the exchange differently. Interview with CIA Iraq WMD Review Group analyst (Sept. 20, 2004). CIA efforts to obtain clarification on this point were unsuccessful, and the sourcing for this report remains unclear as of early 2005. *Id.*

[50] Interview with NIO/SNP (Sept. 20, 2004); Interview with DOE intelligence analyst (Oct. 27, 2004) (confirming that NSA and NGA agreed with the CIA/DIA position at the NIE coordination meetings); Interview with DOE intelligence analyst (Oct. 27, 2004) (same). An NSA official represented to the Commission in July 2004 that NSA had taken no position on the tubes issue at the NIE coordination. Interview with NSA official (July 14, 2004). As those who attended the NIE coordination meeting described it, however, NSA and NGA agreed to support the CIA/DIA position, and neither NSA nor NGA raised any objection when their positions were recorded as such. Interview with NIO/SNP (Sept. 20, 2004); Interview with DOE intelligence analyst (Oct. 27, 2004).

[51] NIE at pp. 81-85.

[52] *Id.* at p. 18. The NIE's reference to "high speed balancing machines" erroneously combines two separate pieces of equipment; it should have mentioned high-speed spin testing machines and balancing machines. DCI Statement for the Record at Tab 1, p. 32; *see also* Interview with NIO/SNP (Sept. 20, 2004).

[53] NIE at pp. 12-13; *see, e.g.*, Classified intelligence reporting (reflecting procurement attempts and noting that the items could be used in a nuclear program but providing no evidence they were intended for such a purpose); Senate Select Committee on Intelligence, *Report on the U.S. Intelligence Community's Prewar Intelligence Assessments on Iraq* (July 7, 2004) at pp. 119-120, 140 (noting no direct evidence of intended use in a nuclear program)

(hereinafter "SSCI").

[54] NIE at pp. 6, 19, 21.

[55] *See, e.g.,* Classified intelligence report (March 2000) (including assessment that as of December 1998 Iraq had the personnel and organizational resources to rapidly restart its nuclear program); Classified intelligence report (Nov. 1995) (assessment of a foreign liaison service that Iraq's scientific and technical staff has remained intact); Department of Defense, Classified intelligence report (April 2001) (construction activity indicates effort to restart nuclear research program); *see also* DCI Statement for the Record at Tab 1, pp. 21-22.

[56] Classified intelligence report (April 2002); Classified intelligence report (Nov. 2000).

[57] Classified intelligence report (April 2002); Classified intelligence report (Nov. 2000); *see also* SSCI at p. 124; Comments from NGA (March 3, 2005). With respect to the NIE's statement that "activity" at suspect sites had "increased" (NIE at p. 23), the NIO and CIA analysts told the SSCI that there was no new activity taking place at the suspect sites; the "activity" referred to in the NIE was the continuing work of personnel at these sites. SSCI at p. 124. The NIE also mentioned in a text box that defector reporting indicated that Iraq may have constructed another, new nuclear facility. NIE at p. 20. This assessment was based on reporting from a joint CIA-DIA source, all of whose reporting was disseminated by DIA. After the war, CIA attempted to verify the location of facilities in Iraq that the source had described and was unable to do so; further investigation led CIA to conclude that the source was "directed" by the Iraqi National Congress. Interview with CIA counterintelligence official (Dec. 8, 2004). As of March 3, 2005, however, the DIA had not recalled the source's reporting. Comments from CIA/DO (March 3, 2005).

[58] NIE at p. 25.

[59] *Id.*

[60] *Id.* Yellowcake is uranium ore concentrate, produced during the milling process of uranium ore.

[61] *Id.* at pp. 5-8.

[62] Interview with NIO/SNP (Sept. 20, 2004). In addition to recalling the reporting, CIA briefed the congressional intelligence committees in June 2003 that, given the recall of the earlier reporting, there was insufficient evidence to conclude that Iraq had recently sought uranium from Africa. *Id.* Further details regarding the forged documents are discussed below.

[63] As noted, in the President's Summary of the NIE, INR's position was more equivocal; INR judged that the overall evidence "indicates, at most, a limited Iraqi nuclear reconstitution effort." NIC, President's Summary, NIE, *Iraq's Continuing Programs for Weapons of Mass Destruction* (PS/NIE 2002-16HC) (Oct. 2002).

[64] *Id.* at pp. 81-83; *see also* DCI Statement for the Record at Tab 1, p. 28. INR agreed with DOE's assessment of the tubes. NIE at pp. 84-85. The President's Summary of the NIE reflected the NIE's conclusions, noting that "[m]ost agencies judge that Iraq is reconstituting its nuclear weapons program." The Summary explained that "[m]ost agencies judge" that Iraq's pursuit of aluminum tubes was "related to a uranium enrichment effort." Finally, the Summary also explained that "INR and DOE believe that the tubes more likely are intended for conventional weapon uses." NIC, President's Summary, NIE, *Iraq's Continuing Programs for Weapons of Mass Destruction* (PS/NIE 2002-16HC) (Oct. 2002). The unclassified version of the NIE repeats the bottom-line assessment from the NIE that "if left unchecked, [Iraq] probably will

have a nuclear weapon during this decade." The unclassified NIE also noted the disagreement over the tubes, explaining that "[m]ost intelligence specialists assess" that the tubes were intended for use in a centrifuge program, "but some believe that these tubes [were] probably intended for conventional weapons programs." NIC, *Iraq's Weapons of Mass Destruction Programs* (Oct. 2002) (unclassified NIE) at p. 1.

[65] Interview with DOE intelligence analyst (Oct. 27, 2004); *see also* DOE, Daily Intelligence Highlights, *Iraq: Nuclear Reconstitution Efforts Underway*? (July 22, 2002); DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Recent Aluminum Tube Procurement Efforts* (TIN 000108) (Sept. 13, 2002) (judging that these other indicators collectively indicate intention to rejuvenate Iraq's nuclear weapons program). DOE stated its reliance on these factors, with the exception of its reliance on evidence of Iraqi efforts to obtain uranium from Africa, in the NIE. NIE at p. 6.

[66] Interview with NIO/SNP (Sept. 20, 2004).

[67] DCI Statement for the Record at Tab 1, p. 28; INR, *Iraq: Quest for Aluminum Tubes* (Oct. 9, 2002) at p. 1 (noting that INR accepted DOE's technical assessment of the tubes).

[68] *Id.*; *see also* Interview with DOE intelligence analyst (Oct. 27, 2004).

[69] DOE, Daily Intelligence Highlights, *Iraq: Gas Centrifuge Program Recounted* (Nov. 8, 2002) at p. 1 (reaffirming earlier assessments that while the tubes could be modified for centrifuge use their more likely end use is fabrication of motor cases for tactical rockets).

[70] NGIC, Assessment, *Iraq: Specialty Aluminum Tubes Are an Exercise in Deception* (Nov. 25, 2002) at p. 1 (noting the tube specifications are excessive for disposable rocket application and suggest probable application in a nuclear centrifuge); Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004).

[71] Department of State, UNVIE Vienna 001134 (July 25, 2002); UNVIE Vienna 000240 (March 4, 2003) (Iraq explanation that tubes are for 81 mm rocket program is "credible").

[72] Senior Executive Memorandum, *Questions on Why Iraq is Procuring Aluminum Tubes and What the IAEA Has Found to Date* (Jan. 10, 2003) (noting that CIA, DIA, NGA, and NSA all assess that the tubes are most likely for centrifuges, while DOE intelligence and INR believe that the tubes are for the rocket program).

[73] Senior Executive Memorandum, Title Classified (Feb. 1, 2003); Senior Executive Memorandum, *What We Think of the IAEA's Analysis of Iraq's Attempt to Purchase Aluminum Tubes* (Dec. 26, 2002) (Iraqi claims that the tubes are for rockets may be "subterfuge" since the disagreement within the Intelligence Community regarding the tubes has appeared in the press); *see also* NGIC, Assessment, *Iraq: Specialty Aluminum Tubes Are an Exercise in Deception* (Nov. 25, 2002) (noting that Iraqi middlemen started to claim the tubes were for rockets after press reports revealed the dispute within the U.S. government on their intended use).

[74] *See, e.g.*, Senior Executive Memorandum, *Key Milestones in Our Assessments of Iraq's Nuclear Program* (Sept. 14, 2002) (noting the debate over the tubes' intended use but also the fact that "Iraq's denial and deception programs and the lack of human intelligence have resulted in intelligence gaps"); Senior Publish When Ready, *Evidence of Iraq's Nuclear Weapons Program Other Than the Aluminum Tube Procurement Effort* (Jan. 17, 2003) ("We have less access to information on Saddam's nuclear weapons intent and activities today than before the Gulf War, a time when significant nuclear developments escaped our detection.").

[75] Committee of Privy Counsellors, Chairman the Rt. Hon The Lord Butler of Brockwell,

KG GCB CVO, Chairman, *Review of Intelligence on Weapons of Mass Destruction* (July 14, 2004) at p. 132 (noting March 2002 Joint Intelligence Committee assessment) (hereinafter "Butler Report"). The British Government's unclassified dossier of September 2002 assessed that "the present Iraqi programme is almost certainly seeking an indigenous ability to enrich uranium to the level needed for a nuclear weapon." The dossier noted that while there was "no definitive intelligence" that the aluminum tubes were destined for a nuclear program, the tubes have "potential application in the construction of gas centrifuges" used to enrich uranium. *Id.*

[76] Australian Parliamentary Joint Committee on ASIO, ASIS and DSD, *Intelligence on Iraq's Weapons of Mass Destruction* (Dec. 2003) at p. 61; *see also* Government of the Commonwealth of Australia, *Report of the Inquiry into Australian Intelligence Agencies* (July 2004).

[77] ISG Report, Nuclear, at p. 7.

[78] *Id.* at pp. 7-8.

[79] *Id.* at p. 8.

[80] *Id.* at pp. 1, 8-9.

[81] *Id.* at pp. 3-4.

[82] *Id.* at pp. 7, 30. After the invasion of Kuwait and the embargo, Iraq undertook a "crash program" to produce a nuclear weapon. This program required the diversion of IAEA-safeguarded research reactor fuel at Tuwaitha. Iraq planned to further enrich some reactor fuel by building a centrifuge. The program encountered many obstacles, however, and never got off the ground. *Id.* at p. 4.

[83] *Id.* at pp. 4, 7.

[84] *Id.* at pp. 4-5. The ISG Report noted that since Operation Iraqi Freedom began, two scientists from Iraq's pre-1991 nuclear weapons program have emerged to provide the ISG with uranium enrichment technology and components, which they had kept hidden from inspectors. These scientists kept uranium enrichment documentation and technology in anticipation of renewing these efforts—actions that they contend were officially sanctioned. *Id.* at pp. 8, 73. Specifically, one former EMIS scientist hid EMIS-related material and equipment near his home. The former head of Iraq's pre-1991 centrifuge program also hid centrifuge components and a complete set of workable centrifuge blueprints at his home in 1991, for the purpose of reconstituting the program once sanctions were lifted. *Id.* at pp. 73-74.

[85] *Id.* at p. 5.

[86] *Id.*

[87] *Id.* at pp. 7-8. The ISG noted that significant looting and damage have occurred since the beginning of Operation Iraqi Freedom (OIF) at most of the dual-use manufacturing facilities that supported the pre-1991 EMIS program. Accordingly, the ISG has not been able to confirm that the Iraqi regime attempted to preserve the EMIS technology, although one scientist with the pre-1991 program kept documents and components that would be useful in restarting such an effort, as noted above. *Id.* at p. 8.

[88] *Id.* at p. 9.

[89] *Id.* at p. 5.

[90] *Id.* Iraq tried various means to retain scientists, including restricting foreign travel and preventing scientists from seeking other jobs. *Id.* Iraq later also tried to restore some of the incentives that scientists working in the nuclear program had previously enjoyed, as discussed below. *Id.* at pp. 5-6.

[91] *Id.* Saddam Hussein raised salaries for employees in the MIC and IAEC in the late 1990s, reinstituting the pay differential that former nuclear personnel enjoyed under Hussein Kamil and that had been cut after his defection. *Id.*

[92] *Id.* at pp. 35-36. These technologies—which included projects to acquire a magnet production line at Al Tahadi, carbon fiber filament winding equipment for missile fabrication, and machines for rotary balancing and spin testing—were intended to improve specific military or commercial products, according to the ISG. *Id.*

[93] *Id.* at p. 21.

[94] *Id.*

[95] *Id.* at pp. 22-23. Ja'far explained that the diameter of the tubes would cause the enrichment output to be far lower than the centrifuge design Iraq had pursued before 1991. *Id.*

[96] *Id.*

[97] *Id.*

[98] *Id.* Other sources, however, indicated the range and accuracy problems were caused by other factors, such as poor quality propellant. *Id.* at p. 25.

[99] *Id.*

[100] *Id.* at pp. 25-26.

[101] *Id.* at p. 21. The ISG based its findings regarding the tubes on interviews with both nuclear and rocket experts. *Id.*

[102] *Id.*

[103] *Id.* at pp. 21, 27.

[104] *Id.* at p. 28.

[105] *Id.* at pp. 27-28.

[106] *Id.* at p. 29.

[107] *Id.*

[108] *Id.* at p. 21.

[109] *Id.* at p. 30; *see also* NIE at p. 78.

[110] ISG Report, Nuclear at p. 30. Iraqi procurement agents customarily relied on intermediaries so as to disguise Iraq as the end-user. But because such efforts are disguised, it is often difficult to determine on whose behalf a procurement request is made. Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004). In this instance, the ISG did not find a clear connection linking the procurement request to Iraq. ISG Report, Nuclear at p. 30. Also, it was not clear whether the request for a larger tube was inadvertent. Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004); Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004).

[111] ISG Report, Nuclear at p. 30.

[112] *Id.* at p. 22.

[113] *Id.* at p. 9. Coalition forces found 16 barrels of material in May 2003 that were associated with the yellowcake plant Iraq had at al Qaim—material that ISG believes is associated with the pre-1991 nuclear program. Known Iraqi holdings of yellowcake were accounted for by the Coalition and the IAEA in June 2004. *Id.* at pp. 9-13.

[114] *Id.* at pp. 4, 9.

[115] Raymond Whitaker, "Niger Timebomb: The Diplomat, the Forgery, and the Suspect Case for War," *The Independent on Sunday* (Aug. 10, 2003) at p. 8.

[116] ISG Report, Nuclear at p. 9.

[117] *Id.* at pp. 9-11.

[118] *Id.* at p. 11.

[119] *Id.*

[120] *Id.* at pp. 7-8. As noted, two scientists retained documents and components that could have the potential to contribute to a restart of the program, but this activity was isolated. *Id.* at pp. 8-9, 73.

[121] *Id.* at p. 6.

[122] Part of that thorough review would include input from experts, such as input from the Joint Atomic Energy Intelligence Committee (JAEIC)—a DCI committee operating under the auspices of the National Intelligence Council that is charged with analyzing technical nuclear issues. DCI Statement for the Record at Tab 1, p. 4. The JAEIC offered to convene an interagency meeting to discuss the issue in the spring and again in the summer of 2002, but no such meeting was held. JAEIC, *Letter Responding to Written Questions From Commission Staff* (Jan. 5, 2005). The meeting was not held, according to the JAEIC, because the CIA informed the JAEIC staff in early August 2002 that CIA was not ready to discuss its position. *Id.* The JAEIC did not convene after the NIE was requested in early September 2002 because the JAEIC member agencies could not support both efforts at the same time on the compressed time scheduled for the NIE, according to the JAEIC. *Id.* According to CIA, on the other hand, CIA had proposed in August that the JAEIC prepare an assessment of the tubes, but that assessment was not completed before Congress requested the NIE. Comments from CIA WINPAC (March 3, 2005). And the JAEIC did not convene a discussion after the NIE was published because the NIE had already set forth the differing positions of the various Intelligence Community agencies. JAEIC, *Letter Responding to Written Questions From Commission Staff* (Jan. 5, 2005). Whether the JAEIC could have produced a consensus opinion on the tubes is an open question, but because the dispute did not turn solely on technical issues—all agencies agreed that the tubes *could* be used to build centrifuges—they differed only on whether they *would* be used for centrifuges. *See also* DOE, *Letter from Director DOE Intelligence Responding to Written Questions* (Dec. 30, 2004) (noting that all agencies agreed tubes could be used for centrifuges and that the dispute was whether they would be used for that purpose).

[123] As discussed above, the Intelligence Community was not of one mind on the significance of the tubes for Iraq's nuclear program. CIA, DIA, NSA, and NGA agreed that the tubes were for use in a gas centrifuge program, while DOE and INR believed the tubes were more likely for use in tactical rockets. In any event, the majority position of the Intelligence Community, as presented to the policymakers before Operation Iraqi Freedom, was that Iraq was reconstituting its nuclear program and that the aluminum tubes were "compelling evidence" of that effort.

[124] NIE at p. 16.

[125] DIA, Military Intelligence Digest Supplement, *Iraq: Procuring Possible Nuclear-Related Gas Centrifuge Equipment* (MID-227-01-SCI) (Nov. 30, 2001); DIA, Defense Intelligence Assessment, *Iraq's Reemerging Nuclear Weapon Program* (DI-1610-93-02-SCI) (Sept. 2002); CIA, *Iraq's Hunt for Aluminum Tubes* (WINPAC IA 2002-051HCX) (Sept. 30, 2002).

[126] DIA, *Iraq's Reemerging Nuclear Weapon Program* (DI-1610-93-02-SCI) (Sept. 2002); CIA, *Iraq's Hunt for Aluminum Tubes* (WINPAC IA 2002-051HCX) (Sept. 30, 2002).

[127] SSCI at p. 100.

[128] DCI Statement for the Record at Tab 1, p. 27 & n. 100. CIA analysts explained that the IAEA inspection result from 1996 did not carry more weight in their analysis because the inspection reporting raised questions about whether the tubes found by the IAEA really were of the right high-strength alloy needed for centrifuges. Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004). For its part, DOE believed that there was no plausible reason for Iraq to have *overstated* its declaration to claim that the tubes were made of 7075 T6 aluminum—an item Iraq was proscribed from possessing under United Nations Security Council resolutions—if the tubes were actually made of something else. Interview with DOE intelligence analyst (Oct. 27, 2004). In any event, the IAEA subsequently tested the tubes in early February 2003 and confirmed that they were in fact 7075 T6 aluminum. Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004).

[129] CIA, *Iraq's Hunt for Aluminum Tubes* (WINPAC IA 2002-051HCX) (Sept. 30, 2002) (text box with NGIC's position) at p. 7. NGIC states that it did not receive the 1996 Iraqi declaration to the IAEA. Interview with NGIC officials (Dec. 7, 2004).

[130] SSCI at p. 100. Iraq's Nasser 81 mm rocket is reverse-engineered from the Italian Medusa air-to-ground rocket. NGIC, *Iraq: Specialty Aluminum Tubes are an Exercise in Deception* (Nov. 25, 2002) at p. 2.

[131] Interview with NGIC analysts (Dec. 7, 2004); DIA, Military Intelligence Digest Supplement, *Iraq: Procuring Possible Nuclear-Related Gas Centrifuge Equipment* (MID-227-01-SCI) (Nov. 30, 2001). The U.S. Mark 66 2.75-inch rocket uses a 7075 T6 aluminum case, and has manufacturing specifications "roughly comparable" to the Iraq tubes. NGIC, *Iraq: Specialty Aluminum Tubes are an Exercise in Deception* (Nov. 25, 2002) at pp. 1-2; Interview with NGIC analysts (Dec. 7, 2004).

[132] DIA, Military Intelligence Digest Supplement, *Iraq: Procuring Possible Nuclear-Related Gas Centrifuge Equipment* (MID-227-01-SCI) (Nov. 30, 2001).

[133] DCI Statement for the Record at Tab 1, p. 27 & n.100.

[134] DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 6; IAEA Inspection Report, Nassr GE (Sept. 22, 1996).

[135] Interview with NGIC analysts (Dec. 7, 2004).

[136] SSCI at p. 133.

[137] NGIC, *Iraq: Specialty Aluminum Tubes Are an Exercise in Deception* (Nov. 25, 2002) at p. 2 (noting that efforts to obtain specifications for the Medusa had to that point been unsuccessful).

[138] Classified cable traffic (Sept. 2002); Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004). Many months later, CIA finally obtained and disseminated information from the Italians on the Medusa specifications. Classified intelligence report (Nov. 2003). The specifications were slightly less stringent than those sought by Iraq, but slightly more stringent than those of comparable U.S. rockets. The differences were minimal, however. NGIC, Assessment, *Iraq: Specialty Aluminum Tubes Are an Exercise in Deception* (Nov. 25, 2002) at p. 2; *see also* Interview with NGIC analysts (Dec. 7, 2004).

[139] Interview with CIA WINPAC nuclear analyst (Oct. 8, 2004); Interview with DOE intelligence analyst (Oct. 27, 2004).

[140] Interview with CIA WINPAC nuclear analyst (Oct. 8, 2004). DOE Office of Intelligence, Technical Intelligence Note, *Iraqi Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) (providing technical assessment of how such tubes might perform in a centrifuge application)

[141] *Id*.; Interview with DOE intelligence analyst (Oct. 27, 2004); *see also* DOE, Daily Intelligence Highlights, *Iraq High-Strength Aluminum Tube Procurement* (April 11, 2001) (noting that the small tube diameter would pose "various design and operational problems and limitations"); DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 9 (same).

[142] DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Seeking Additional Aluminum Tubes* (TIN 000084) (Dec. 17, 2001) at p. 3; DOE Office of Intelligence Technical Intelligence Note, *Iraqi Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 8.

[143] DOE Office of Intelligence Technical Intelligence Note, *Iraqi Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 11.

[144] *Id*. at pp. 4, 11.

[145] Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004). WINPAC analysts contacted the technical group within the CIA/DO's Counter Proliferation Division (CPD) for assistance in testing the tubes; CPD recommended a contractor to perform the tests. DOE did not assist with these tests, and DOE never performed any tests of its own on the tubes.

[146] Interview with CIA WINPAC nuclear analyst (Oct. 8, 2004).

[147] NIE at p. 76. This initial spin test was done without first balancing the tubes, "a critical step required for full-speed operation." *Id.*

[148] Interview with CIA WINPAC nuclear analyst (Oct. 8, 2004).

[149] *Id.*; *see also* Classified intelligence report (June 2003) (reissuing earlier report on spin-test results; that report had been issued in January 2003 and reissued once previously with corrections in May 2003).

[150] DOE Office of Intelligence, Technical Intelligence Note, *Technical Evaluation of CIA Spin Tests of Iraqi Aluminum Tubes* (TIN 000127) (May 2003); *see also* Interview with DOE intelligence analyst (Oct. 27, 2004).

[151] Interview with former Assistant Secretary of State for Intelligence and Research (Nov. 1, 2004). This official noted that INR and DOE viewed the CIA's reliance on the tubes as a "forced argument" designed to support the pre-conceived conclusion of reconstitution. *Id.*

[152] NIE at p. 17.

[153] DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 9. DOE's view was that the tubes were "too thick for the design we assess that Iraq is most likely to be pursuing." DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Recent Aluminum Tube Procurement Efforts* (TIN 000108) (Sept. 13, 2002) at p. 3. DOE also viewed the tubes as "too thick for *favorable* use as rotor tubes." DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 9 (emphasis added). DOE noted that the tubes "could be modified" for use in centrifuge rotors.

DOE explained that "we can conceive of various workable schemes to modify the tubes for favorable centrifuge rotor use," including machining the inner and outer surfaces, which DOE judged to be within the Iraqis' capabilities if they had the proper tools. The modifications envisioned by DOE were "up to and including re-melting the tubes and restarting…[the] fabrication process." DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at pp. 8-10. If the tubes were used *without* thinning the walls, modifications to other parts of the centrifuge system would require "significant additional research and development." DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Seeking Additional Aluminum Tubes* (TIN 000084) (Dec. 17, 2001) at p. 2. A DOE analyst told Commission staff that DOE did not rule out the possibility that the tubes could be used in gas centrifuges until after the commencement of OIF. Interview with DOE intelligence analyst (Oct. 27, 2004).

[154] NIE at p. 77; CIA, *Iraq's Hunt for Aluminum Tubes: Evidence of a Renewed Uranium Enrichment Program* (WINPAC IA 2002-051HCX) (Sept. 30, 2002) at p. 4. The Zippe and Beams-type gas centrifuges are based on declassified designs from the early 1960s that were instrumental in the early Russian and U.S. centrifuge programs. NIE at p. 77.

[155] NIE at p. 79, n. 7. A CIA WINPAC nuclear analyst explained that the Zippe design does not explicitly state a wall thickness for the rotors, and that a range of workable thicknesses can be arithmetically derived from other design specifications. Interview with CIA WINPAC nuclear analyst (Oct. 8, 2004).

[156] Interview with CIA WINPAC nuclear analyst (Oct. 8, 2004).

[157] NIE at p. 78.

[158] DIA, *Iraq's Reemerging Nuclear Weapon Program* (DI-1610-93-02-SCI) (Aug. 7, 2002) at p. 9.

[159] CIA WINPAC analysts noted, however, that the Urenco designs used rotors made of carbon fiber or maraging steel that Iraq was incapable of making itself. Interview with CIA WINPAC nuclear analyst (Oct. 8, 2004).

[160] DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Seeking Additional Aluminum Tubes* (TIN 000084) (Dec. 17, 2001) at p. 3. DOE told the SSCI that Zippe's designs "had wall thicknesses" of a figure different than that indicated in the NIE's chart, and that DOE had "explained" this to CIA analysts "several times." SSCI at p. 110. But, as noted, according to CIA analysts a range of wall thicknesses can be arithmetically derived from Zippe's design. In fact, DOE later conceded that Zippe built at least one rotor with a thicker wall, according to the NIO/SNP. The NIO noted that the Senate Select Committee on Intelligence dropped DOE's concession from the final SSCI report when DOE conceded that Zippe had, in fact, made a thicker tube. According to the NIO, this revelation was contrary to a statement DOE made in the NIE (at p. 77) and in subsequent discussions until the SSCI was finalizing its report and DOE recognized its error. Interview with NIO/SNP (Sept. 20, 2004). DOE, for its part, disputes that it ever made the concession that Zippe built at least one rotor with a thicker wall. Comments from DOE (March 3, 2005). In interviews with Commission staff, a DOE analyst would only reiterate that a former DOE official had spoken to Mr. Zippe and that Mr. Zippe himself used a design with a thinner wall. The DOE analyst conceded, however, that the Zippe report, which is the only insight into the Zippe design that Iraq was likely to have, does not specify a wall thickness. Interview with DOE intelligence analyst (Oct. 27, 2004).

[161] Interview with DOE intelligence analyst (Oct. 27, 2004).

[162] *Id.*

[163] NIE at pp. 17, 78; *see also* CIA, *Iraq's Hunt for Aluminum Tubes: Evidence of a Renewed Uranium Enrichment Program* (WINPAC IA 2002-051HCX) (Sept. 30, 2002) at p. 4; NGIC, *Iraq: Specialty Aluminum Tubes Are an Exercise in Deception* (NGIC-1143-7184-03) (Nov. 25, 2002) at pp. 1-2.

[164] DOE Office of Intelligence, Technical Intelligence Note, *Iraq: Seeking Additional Aluminum Tubes* (TIN 000084) (Dec. 17, 2001) at pp. 2, 4; DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 9; *see also* SSCI at p. 104.

[165] DOE Office of Intelligence, Technical Intelligence Note, *Iraq's Gas Centrifuge Program: Is Reconstitution Underway?* (TIN 000064) (Aug. 17, 2001) at p. 9 (noting tubes could be used if the walls were thinned); DOE Office of Intelligence Technical Intelligence Note, *Iraq: Seeking Additional Aluminum Tubes* (TIN 000084) (Dec. 17, 2001) at p. 2 (if tubes used without thinning the walls, modifications to other parts of the centrifuge system would require "significant additional research and development"); *see also* Butler Report at pp. 130-131; NIE at p. 77 (NIE assessment that the 900 mm tubes would have to be cut to make two 400 mm rotors); NIE at pp. 81-84 (noting views of DOE, INR, and IAEA that tubes would require other modifications before being used in centrifuge rotors).

[166] Butler Report at pp. 130-131.

[167] SSCI at p. 103. In fact, IAEA interviews with Iraqi engineers in early 2003 indicated that Iraq may have over-specified the tubes for use in rockets because of engineering inexperience. Interview with DOE intelligence analyst (Oct. 27, 2004).

[168] NIE at p. 17. *See, e.g.*, Classified intelligence reporting (Aug. 2001); (Jan. 2002); *see also* SSCI at p. 105.

[169] SSCI at p. 105. Moreover, IAEA inspection information indicated that Iraq had paid approximately $15-$20 for the tubes it acquired in the 1980's. *Id.*

[170] Denial refers to the ability to prevent the Intelligence Community from collecting intelligence, for example, by avoiding overhead imagery or by encrypting communications. Deception refers to the ability to manipulate intelligence with false or misleading information, for example, by disseminating "cover stories" for illicit activity, by directing controlled or "double agents" at U.S. intelligence, or by presenting decoy structures for imagery. *See* Department of Defense, *Iraqi Denial and Deception for Weapons of Mass Destruction and Ballistic Missile Programs* (Oct. 8, 2002).

[171] NGIC, *Iraq: Specialty Aluminum Tubes Are an Exercise in Deception* (NGIC-1143-7184-03) (Nov. 25, 2002) at p. 4. Similarly, the CIA noted that Iraq's claim that the tubes are intended for rockets "may be a deception effort by Baghdad to deflect attention away from nuclear-related procurements." CIA, *Iraq's Hunt for Aluminum Tubes: Evidence of a Renewed Uranium Enrichment Program* (WINPAC IA 2002-051HCX) (Sept. 30, 2002) at pp. 2-3.

[172] Senior Executive Memorandum, Title Classified (Feb. 1, 2003).

[173] To its credit, CIA WINPAC did attempt to conduct an independent review of its conclusions about the tubes by convening a panel of centrifuge experts to evaluate the relative merits of the two alternative hypotheses for the intended use of the tubes. This team's "independent" review, however, was conducted based on a review of "available documentation" on the subject, a briefing from CIA on the chronology of events surrounding Iraqi attempts to procure the

tubes, a briefing from DOE outlining DOE's views on the tubes, and sample tubes for "visual examination." CIA, Title Classified (Sept. 17, 2002). The team told the SSCI that its review was based primarily on "a stack of documents provided by the CIA" which contained the various intelligence assessments regarding the tubes, and the briefing from DOE. Notes of red team interview with SSCI prepared by CIA Office of Congressional Affairs (Nov. 13, 2003); *see also* DCI Statement for the Record at Tab 1, p. 25 & n. 98. The team concluded that the tubes were consistent with design requirements of gas centrifuge rotors, and inconsistent with design requirements of rocket motor casings. DCI Statement for the Record at Tab 1, p. 25.

[174] Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004).

[175] *Id.* (noting that such a reassessment had been drafted in summer 2004 but was still being reviewed by management in late 2004).

[176] Interview with DOE intelligence analyst (Oct. 27, 2004).

[177] NIE at p. 16.

[178] Classified intelligence reporting (Sept. 2002).

[179] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004).

[180] *Id*. The sourcing for this report remains unclear as of 2005. *Id.* Similarly, the NIE indicated that in late August 2002, according to sensitive reporting, Iraq asked about increasing the internal diameter and wall thickness each by 1.0 mm, thus increasing the external diameter by 3.0 mm. NIE at p. 78. This information was also from the liaison service. Classified intelligence report (Aug. 2002). The procurement attempt, however, was never definitively linked to Iraq. Interview with CIA WINPAC nuclear analysts (Oct. 8, 2004); Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004).

[181] NIE at pp. 18-19.

[182] SSCI at pp. 119-120; *see also* Interview with NIO/SNP (Sept. 20, 2004). The DCI Statement for the Record noted that this mistaken reference was traceable to an earlier CIA/NESA publication. The workers had been associated with Iraq's Electromagnetic Isotope Separation (EMIS) uranium enrichment program. Comments from NIO/SNP (March 3, 2005).

[183] DCI Statement for the Record at Tab 1, p. 32.; SSCI at p. 120. This mistake was also traced to the earlier CIA/NESA publication. Comments from NIO/SNP (March 3, 2005).

[184] NIE at pp. 18-19; DOE, Intelligence Highlights, *Iraq: Nuclear Reconstitution Efforts Underway?* (July 22, 2002).

[185] Interview with DOE intelligence analyst (Oct. 27, 2004); *see also* Interview with CIA WINPAC nuclear analyst (Aug. 11, 2004). CIA, on the other hand, was more concerned about the uranium Iraq already had in-country, as described in the NIE. Although Iraq's stockpile of low enriched uranium was inspected once per year by the IAEA, CIA was concerned that the uranium could be diverted for enrichment and weapons before anyone detected it was missing. Interview with NIO/SNP (Sept. 20, 2004); *see also* DCI Statement for the Record at Tab 1, p. 22. The NIO/SNP briefed the SSCI on October 4, 2002 and explained that the uranium information was not in the Key Judgments of the NIE and was included in the body for completeness—but only after first noting that Iraq already had uranium in country as noted above. Comments from NIO/SNP (March 3, 2005).

[186] Interview with NIO/SNP (Sept. 20, 2004).

[187] Interview with former senior intelligence officer.

[188] Interview with DOE intelligence analyst (Oct. 27, 2004).

[189] Interview with NIO/SNP (Sept. 20, 2004) (only DOE relied on the uranium from Niger information to support the case for reconstitution).

[190] The President stated that "the British Government has learned that Saddam Hussein recently sought significant quantities of uranium from Africa." President George W. Bush, Address Before a Joint Session of the Congress on the State of the Union (Jan. 28, 2003). A related problem within the Intelligence Community is that, when asked to vet the State of the Union speech, the Intelligence Community lacked a formal process to do so. Department of State and CIA, *Department of State and CIA: The Joint Report of the Inspectors General of CIA and State on the Alleged Iraqi Attempts to Procure Uranium From Niger* (Sept. 2003) (noting the lack of a formal vetting process and recommended the institution of more formalized procedures).

[191] NIE at p. 25.

[192] Classified intelligence report (Oct. 2001); Classified intelligence report (Feb. 2002); Classified intelligence report (March 2002). There was additional reporting that Iraq was seeking to procure uranium from Africa, but this reporting was not considered reliable by most analysts at the time, and it was subsequently judged not credible and recalled. Interview with CIA WINPAC nuclear analysts (Aug. 11, 2004); CIA, Memorandum for the DCI, *In Response to Your Questions for Our Current Assessment and Additional Details on Iraq's Alleged Pursuits of Uranium From Abroad* (June 17, 2003) at p. 2. For example, separate reporting indicated Iraq had offered weapons to a country in exchange for uranium. Classified intelligence report (April 1999). There were two human intelligence reports in March-April 1999 indicating that a delegation of Iraqis, Iranians, and Libyans had arrived in Somalia to discuss the possibility of extracting uranium from a Somali mine. Classified intelligence report (March 1999); Classified intelligence report (April 1999). Another report indicated further Iraqi involvement with a uranium purchase. Classified intelligence report (April 2002); *see also* SSCI at p. 47 n. 6; CIA, Memorandum for the DCI, *In Response to Your Questions for Our Current Assessment and Additional Details on Iraq's Alleged Pursuits of Uranium From Abroad* (June 17, 2003) at p. 2. There was also one report from a U.S. Department of Defense agency that indicated that a large quantity of uranium was being stored in a warehouse in Cotonou, Benin, destined for Iraq. Classified intelligence report (Nov. 2002). A Defense HUMINT officer checked the warehouse one month later and saw only what appeared to be bales of cotton. Defense HUMINT did not report these findings, however, until February 10, 2003. SSCI at pp. 59-60, 68. A CIA cable dated January 2003 had reported that a foreign liaison service claimed that the uranium stored at the warehouse in Benin was not destined for Iraq. SSCI at p. 59-60, 64.

[193] Classified intelligence report (Feb. 2002).

[194] *Id.*; Classified intelligence report (Dec. 2001).

[195] Interview with CIA WINPAC nuclear analyst (Sept. 20, 2004); *see also* SSCI at p. 38.

[196] SSCI at p. 38.

[197] *Id.* at pp. 39-42.

[198] Classified intelligence reporting (March 2002); *see also* SSCI at p. 43.

[199] Classified intelligence reporting (March 2002).

[200] *Id.*

[201] *Id.*

[202] *Iraq's Weapons of Mass Destruction: The Assessment of the British Government* (Sept.

2002) (unclassified) (also referred to as the "Dossier" or "white paper").

[203] Interview with CIA/DO officials (Sept. 3, 2004) (noting that the documents were passed to the Embassy on Oct. 9, 2004); *see also* Department of State, Rome 004988 (Oct. 11, 2002) (cable from U.S. Embassy Rome reporting receipt of the documents on October 9).

[204] Department of State and CIA, *Joint Report of Inspectors General on Iraqi Attempts to Procure Uranium From Niger* (Sept. 2003) at p. 11; CIA, *Analyses on an Alleged Iraq-Niger Uranium Agreement* (undated but prepared sometime after March 7, 2003) (attaching copies and translations of documents); *see also* SSCI at pp. 57-58 (noting that the documents were similar to the original reporting).

[205] Department of State and CIA, *Joint Report of Inspectors General on Iraqi Attempts to Procure Uranium From Niger* (Sept. 2003) at p. 12. Although the documents were made available to CPD several days after they were sent from Rome in mid-October 2002, CPD did not share the documents with WINPAC or attempt to assess their authenticity. *Id.*, Appendix, at pp. 6-7.

[206] Senior Publish When Ready, *Request for Evidence of Iraq's Nuclear Weapons Program Other Than the Aluminum Tube Procurement Effort* (Jan. 17, 2003). By January 2003, CIA WINPAC analysts had come to believe that such uranium procurement efforts, if they could be shown to be true, would bolster the case that Iraq was reconstituting its nuclear program. Interview with WINPAC nuclear analyst (Sept 20, 2004); *see also* SSCI at pp. 62-63.

[207] SSCI at pp. 63-64.

[208] President George W. Bush, Address Before a Joint Session of the Congress on the State of the Union (Jan. 28, 2003).

[209] SSCI at p. 66; *see also* Interview with NIO/SNP (Sept. 20, 2004) (noting that he never saw a draft of the speech, was not asked to comment on it, and was never contacted about releasing any information from the NIE or otherwise).

[210] Interview with CIA WINPAC nuclear analyst (Sept. 20, 2004); *see also* SSCI at p. 66. Information from the October 2002 NIE on the uranium deal was also provided to Secretary Powell in preparation for his speech to the United Nations, but no statement about uranium from Africa was included in that speech. Department of State and CIA, *Joint Report of Inspectors General on Iraqi Attempts to Procure Uranium From Niger* (Sept. 2003) at p. 26. Secretary Powell, during his meetings at CIA to vet the speech, was informed that there were doubts about the Niger reporting and did not include it for that reason. *Id.* Even after the documents were found to be forgeries, however, DIA provided memoranda to the Office of the Secretary of Defense indicating that other corroborating information still existed. But that information consisted of the report from Ambassador Wilson, and the report from the Defense Department agency regarding a warehouse in Benin. SSCI at pp. 69-71.

[211] CIA, *Congressional Notification Regarding Purported Iraqi Attempt to get Uranium from Niger* (April 3, 2003) at p. 7.

[212] IAEA, *Analysis of Relevant Documents* (March 10, 2003).

[213] CIA, *Analyses on an Alleged Iraq-Niger Uranium Agreement* (undated but prepared sometime after March 7, 2003) (appending original and translated documents); IAEA, *Analysis of Relevant Documents* (March 10, 2003); Interview with FBI (Sept. 21, 2004).

[214] CIA, *Analyses on an Alleged Iraq-Niger Uranium Agreement* (undated but prepared sometime after March 7, 2003). *See also* Senior Publish When Ready, *Iraq's Reported Interest*

*in Buying Uranium from Niger and Whether Associated Documents are Authentic* (March 11, 2003) (concluding the documents were forgeries). The errors in the original documents, which indicated they were forgeries, also occur in the February 2002 report that provided a "verbatim" text of the agreement, indicating that the original reporting was based on the forged documents.

[215] Department of State and CIA, *Joint Report of Inspectors General on Iraqi Attempts to Procure Uranium From Niger* (Sept. 2003) at p. 11. Although the *Inspectors General* report notes that all three reports were recalled, CIA/DO officials advised the Commission that in fact two of the reports were recalled and the third, which included information not included in the forged documents, was reissued with a caveat that the information the report contains may have been fabricated. Comments from CIA/DO (March 3, 2005).

[216] CIA, Memorandum for the DCI, *In Response to Your Questions for Our Current Assessment and Additional Details on Iraq's Alleged Pursuits of Uranium From Abroad* (June 17, 2003) at p. 1.

[217] Interview with NIO/SNP (Sept. 20, 2004). The SSCI report referenced the memorandum for the DCI, and stated that the memorandum had no distribution outside the CIA. SSCI at p. 71. This reference left the mistaken impression, however, that CIA did not inform others of its conclusions regarding the forged documents and the concomitant reliability of information about a possible uranium deal with Niger. The NIO/SNP emphasized that CIA not only recalled the original reporting as having possibly been based on fraudulent reporting, but the NIO, with CIA and other agencies in attendance, also briefed Congress on the matter. Interview with NIO/SNP (Sept. 20, 2004).

[218] It is still unclear who forged the documents and why. The Federal Bureau of Investigation is currently investigating those questions. Interview with FBI (Sept. 21, 2004); *see also* Interview with CIA/DO officials (Sept. 3, 2004). We discuss in the counterpart footnote in our classified report some further factual findings concerning the potential source of the forgeries. This discussion, however, is classified.

[219] NIE at pp. 5, 35. The Intelligence Community also judged that Iraq maintained delivery systems for its BW agents. *Id.* at p. 7. For its part, the British Joint Intelligence Committee assessed in September 2002 that Iraq "currently has available, either from pre-Gulf War stocks or more recent production, a number of biological warfare" agents and weapons. Butler Report at p. 74. The Australian Office of National Assessments judged by September 2002 that "Iraq is highly likely to have chemical and biological weapons," that "Iraq has almost certainly been working to increase its ability to make chemical and biological weapons," and, in December 2002, that many of Iraq's WMD activities were hidden in mobile facilities. Australian Parliamentary Joint Committee on Australian Secret Intelligence Organization, Australian Secret Intelligence Service and Defense Signals Directorate, *Intelligence on Iraq's Weapons of Mass Destruction* (Dec. 2003) at pp. 32, 61. With respect to mobile BW facilities, however, the Defense Intelligence Organization assessed in March 2003 that the level of evidence required to confirm the existence of such mobile facilities had not yet been found. *Id.* at pp. 61-62.

[220] NIE at p. 41.

[221] ISG, *Comprehensive Report of the Special Advisor to the DCI on Iraqi WMD,* Volume III, "Biological Warfare," (Sept. 30, 2004) at pp. 1-3 (hereinafter "ISG Report, Biological").

[222] *Id.* at pp. 11-12. Iraq continued to conduct research and development on weaponization until 1995. *Id*. at pp. 13-15.

[223] *Id.*

[224] DCI Statement for the Record at Tab 3, p. 1.

[225] *Id.* at pp. 3-5; *see also* CIA, *Iraq's Biological Warfare Program: Saddam's Ace in the Hole* (SW-90-11052CX) (Aug. 1990) at pp. 4-5.

[226] DCI Statement for the Record at Tab 3, pp. 3-5.

[227] Classified intelligence reporting; *see also* DCI Statement for the Record at Tab 3, p. 2, n. 1.

[228] Classified intelligence reporting; *see also* ISG Report, Biological, at p. 15.

[229] Classified intelligence reporting; *see also* DCI Statement for the Record at Tab 3, pp. 3-5.

[230] CIA, *Iraq's Biological Warfare Program: Well Positioned for the Future* (OTI IR 97-012X) (April 1997).

[231] NIC, *Iraq: Post-Desert Fox Activities and Estimated Status of WMD Programs* (July 1999). *See also* SSCI at p. 143.

[232] CIA, Title Classified (WINPAC IA 2002-059X) (Nov. 21, 2002). *See also* DCI Statement for the Record at Introduction, p. 1.

[233] Interview with CIA WINPAC BW analyst (Oct. 8, 2004). Analysts assessed that Iraq could restart BW production within six months. NIC, *Worldwide BW Programs: Trends and Prospects, Volume I: The Estimate* (NIE 99-05CX/I) (May 1999) at pp. 4 and 43.

[234] Interview with CIA Iraq WMD Review Group analyst (Aug. 3, 2004) ("Substantial volume"); DCI Statement for the Record at Tab 3, p. 6 (citing NIC, *Worldwide Biological Warfare Programs: Trends and Prospects, Update* (NIE 2000-12HCX) (Dec. 2000) (noting that the "new information" caused the Intelligence Community to "adjust…upwards" its 1999 assessment of the BW threat posed by Iraq. The "new information" refers to the Curveball reporting, which began in January 2000.)).

[235] Interview with Defense HUMINT official (Nov. 2, 2004). Defense HUMINT confirmed that it had disseminated 95 reports from Curveball. DIA, *Memorandum from Director, DIA Re: Curveball Background* (Jan. 14, 2005). *See, e.g.*, Classified intelligence reporting. Six reports from Curveball were disseminated in CIA channels: five in 2000 and one in March 2004. Interview with CIA/DO officials (Sept. 27, 2004). The five reports disseminated in 2000 were obtained by WINPAC analysts during meetings with foreign liaison service officials. The remaining report was disseminated when CIA finally obtained direct access to Curveball in March 2004. Comments from CIA/DO (March 3, 2005).

[236] Classified intelligence reporting.

[237] Interview with CIA/DO officials and CIA Iraq WMD Review Group analysts (Aug. 3, 2004).

[238] NIC, *Worldwide Biological Warfare Programs: Trends and Prospects, Update* (NIE 2000-12HCX) (Dec. 2000) at p. 22.

[239] CIA, DCI Nonproliferation Center, *New Evidence of Iraqi Biological Warfare Program* (SIR 2000-003X) (Dec. 14, 2000). *See also* SSCI at p. 144.

[240] CIA, *Iraq: Mobile Biological Warfare Agent Production Capability* (WINPAC IA 2001-050X) (Oct. 10, 2001) at pp. 1, 7.

[241] Senior Publish When Ready, *Iraq: Mobile BW Agent Production Capability* (Sept. 19, 2001) (sources indicate Baghdad continues to pursue a mobile BW capability to produce large

amounts of BW agents covertly).

[242] Interviews with CIA Iraq WMD Review Group analysts (Aug. 3, 2004 and Sept. 20, 2004) (citing to timeline prepared by the CIA Iraq WMD Review Group, quoting the DCI's prepared testimony). Director Tenet based this statement on information obtained from Curveball, whom he described as "a credible defector who worked in the program." The classified version of the report discusses in detail CIA's discovery that the fourth source, whose reporting the DCI stated corroborated Curveball's reporting, was not the direct source of the reporting sourced to him on BW.

[243] The President's Summary of the NIE reflected this finding, noting that "[w]e assess that most elements of Iraq's BW program are larger and more advanced than before the Gulf War" and "[w]e judge that Iraq has some BW agents." NIC, President's Summary, NIE, *Iraq's Continuing Programs for Weapons of Mass Destruction* (PS/NIE 2002-16HC) (Oct. 2002). The unclassified summary of the NIE contained the same assessment. Unclassified NIE at p. 2 ("Iraq has some lethal and incapacitating BW agents" and "[a]ll key aspects…of Iraq's offensive BW program are active and most elements are larger and more advanced than they were before the Gulf War").

[244] NIE at pp. 7, 36, 43.

[245] DCI Statement for the Record at Tab 3, p. 16; *see also* Interview with WINPAC BW analyst (Oct. 8, 2004).

[246] *See, e.g.*, Classified intelligence reporting; *see also Joint CIA-DIA Assessment of [Foreign Service] Source Curveball* (June 7, 2004) at pp. 1-2; SSCI at pp. 148-9.

[247] *Joint CIA-DIA Assessment of [Foreign Service] Source Curveball*, (June 7, 2004) at pp. 1-2; *see, e.g.*, Classified intelligence report (May 2004) (recalling Curveball report).

[248] NIE at pp. 41-43; Interview with WINPAC BW analyst (Oct. 8, 2004); *see also* SSCI at pp. 148-149; Interview with former WINPAC BW analyst (Oct. 25, 2004).

[249] Classified intelligence report; *see also* SSCI at p. 161.

[250] Interview with CIA/DO officials and CIA Iraq WMD Review Group analyst (Aug. 3, 2004); Interview with CIA/DO officials (Sept. 27, 2004). Classified intelligence report (Oct. 2003) (stating that, contrary to the information reported by the same source in June 2001, "there was no equipment for the production of biological weapons at this facility" and that the "source had no knowledge of biological weapons production at other facilities").

[251] Interview with CIA/DO officials (Sept. 27, 2004); Interview with Defense HUMINT official (Nov. 2, 2004).

[252] Interview with Defense HUMINT official (Nov. 2, 2004).

[253] Classified intelligence report (March 2002); *see also* NIC, *The Iraqi National Congress Defector Program* (NIC 1768-02) (July 10, 2002) at pp. 3-5; SSCI at p. 160.

[254] Interview with CIA/DO officials and CIA Iraq WMD Review Group analysts (Aug. 3, 2004); *see also* NIC, *Iraqi National Congress Defector Program* (NIC 1768-02) (July 10, 2002) at pp. 4-5. The NIE actually sourced its information to a *Vanity Fair* article, which quoted the INC source as an unnamed "defector." David Rose, "Iraq's Arsenal of Terror," *Vanity Fair* (May 2002) (cited in source documents to annotated NIE). Defense HUMINT issued a fabrication notice, but never recalled the INC source's reporting. The distinction between these two actions is discussed in the text below.

[255] Interviews with CIA Iraq WMD Review Group analyst (Aug. 3, 2004 and Sept. 20,

2004).

[256] CIA, *Iraq: Biological Warfare Agents Pose Growing Threat to U.S. Interests* (WINPAC IA 2002-060CX) (Nov. 13, 2002).

[257] CIA, *Iraq: Options for Unconventional Use of CBW* (WINPAC IA 2003-010HJX) (Feb. 13, 2003).

[258] Secretary of State Colin L. Powell, Remarks to the United Nations Security Council (Feb. 5, 2003) (annotated version). Referring to Curveball, Secretary Powell said that a chemical engineer who was actually present during BW production runs provided information on the mobile facilities. Referring to the second source, Secretary Powell noted that "a second source, an Iraqi civil engineer in a position to know the details of the program, confirmed the existence of transportable facilities moving on trailers." Referring to the fourth source, Secretary Powell said that a source "in a position to know" reported that Iraq had mobile production systems mounted on trucks and railway cars. Referring to the INC source, Secretary Powell noted that an "Iraqi major who defected confirmed" that Iraq has mobile BW production facilities. *Id.*; *see also* Interview with CIA/DO officials (Aug. 3, 2004); SSCI at p. 161.

[259] CIA, *Iraqi Mobile Biological Warfare Agent Production Plants* (WINPAC) (May 16, 2003).

[260] Interview with CIA WINPAC BW analyst (Oct. 8, 2004); Interview with former CIA WINPAC BW analyst (Nov. 10, 2004) (noting that Curveball was recontacted in April 2003 to query him about the trailers found in Iraq; Curveball was shown pictures of the trailers and he identified components on those trailers that were similar to those on the mobile BW facilities he had described in his earlier reporting). Interview with Defense HUMINT official (Nov. 2, 2004).

[261] ISG Report, Biological at p. 2.

[262] *Id.* at p. 12.

[263] *Id.*

[264] *Id.* at pp. 11-13.

[265] *Id.* at p. 13.

[266] *Id.* at p. 15.

[267] *Id.*

[268] *Id.*

[269] *Id.* at pp. 11-13, 15, 38.

[270] *Id.* at pp. 15, 18, 19, 38.

[271] *Id.* at p. 1.

[272] *Id.* at pp. 3, 73-98.

[273] *Id.* at p. 3.

[274] According to a Defense HUMINT official, when Defense HUMINT pressed for access to Curveball, the foreign service said that Curveball disliked Americans and that he would refuse to speak to them. The CIA also pressed for access to Curveball, but it was not until the DCI himself intervened in late November 2003, stating that CIA officers in Baghdad were uncovering serious discrepancies in Curveball's reporting, that the foreign service allowed U.S. intelligence officials to interview Curveball, in March 2004. Interview with Defense HUMINT official (Nov. 2, 2004); Comments from former WINPAC BW analyst (March 3, 2005); Classi-

fied cable traffic (Nov. 2003). The Senate Select Committee on Intelligence criticized Defense HUMINT for failing to demand that the foreign service provide direct access to Curveball. SSCI at p. 153. We do believe that the leadership of the Intelligence Community should have pressed harder and sooner for access to Curveball; with that said, we think it is difficult to expect that Defense HUMINT could have "demanded" access to another intelligence service's asset. Eventually, the head of the foreign intelligence service only agreed to grant CIA access to Curveball in December 2003 because of the serious discrepancies emerging from analysts' investigation in Iraq. Even then, the head of the foreign service faced significant opposition to his decision to grant access from within his service; several senior foreign service operations officers even threatened to resign if the CIA were allowed access to Curveball. Comments from former WINPAC BW analyst (March 3, 2005); Classified cable traffic (Dec. 2003).

[275] Interview with Defense HUMINT official (Nov. 2, 2004).

[276] *Id.* Defense HUMINT reiterated to Commission staff that in its view it was "impossible" to validate Curveball because Defense HUMINT, like CIA, had been denied direct personal contact with the source. Defense HUMINT, viewing itself as only the "conduit" for the information, allowed the analysts' enthusiastic response to Curveball's reporting to serve as "validation" for the source's veracity. Comments from Defense HUMINT (March 3, 2005). As explained further below, Defense HUMINT's abdication of responsibility in this regard was a serious failing.

[277] SSCI at p. 153; *see also* Interview with CIA WINPAC analysts (Oct. 8, 2004).

[278] SSCI at p. 191.

[279] Interview with CIA/DO officials (Sept. 27, 2004); *see also* CIA/DO description of the DO Asset Validation System (Sept. 2004) (prepared in response to Commission request).

[280] Electronic mail exchange between Defense HUMINT officials (Feb. 12-13, 2003).

[281] Interview with CIA WINPAC BW analyst (Oct. 8, 2004) (noting that other information indicated Curveball's information was plausible). Interviews with former CIA WINPAC BW analyst (Nov. 10, 2004, and Feb. 23, 2005).

[282] Interview with CIA WINPAC BW analyst (Oct. 8, 2004); Interview with former CIA WINPAC BW analyst (Nov. 10, 2004). According to WINPAC analysts, Curveball's reporting seemed to fit a plausible storyline of Iraq's BW efforts. Curveball claimed that Iraq's mobile BW program began in 1995, at about the same time Iraq's BW-related activities at fixed facilities such as Al Hakam were compromised. To analysts, this storyline seemed logical: Iraq had shifted its BW efforts from the compromised fixed facilities to the more easily concealed mobile units. *Id.* This rationale can also be found in CIA, *Iraq: Mobile Biological Warfare Agent Production Capability* (WINPAC IA 2001-050X) (Oct. 10, 2001) at p. 5. ("We judge that the May 1995 planning for construction of mobile BW production units allowed Iraq to admit aspects of its offensive BW program to UNSCOM starting in July 1995.").

[283] Interview with CIA/DO officials and CIA Iraq WMD Review Group analyst (Aug. 3, 2004); Interview with CIA WINPAC BW analyst (Oct. 8, 2004).

[284] Interview with CIA/DO officials and CIA Iraq WMD Review Group analyst (Aug. 3, 2004); Interview with CIA WINPAC BW analyst (Oct. 8, 2004); *see also* SSCI at p. 156.

[285] Classified cable traffic (Feb. 2001).

[286] Electronic mail from Department of Defense detailee ("question re curve ball") (Dec. 18, 2002); SSCI at p. 153.

[287] Interview with former CIA WINPAC BW analyst (Feb. 23, 2005); Interview with CIA/DO official (Feb. 22, 2005); SSCI at p. 154.

[288] Electronic mail from CIA/DO [detailee] to Deputy Chief, Iraqi Task Force, CIA/DO (Feb. 4, 2003).

[289] Interview with CIA/DO officials (Aug. 3, 2004); Interview with CIA Iraq WMD Review Group analyst (Sept. 20, 2004). David Kay of the ISG also told the Commission that the foreign service had "warned" the CIA that the source was questionable before publication of the NIE. Interview with David Kay (May 26, 2004).

[290] Interview with CIA WINPAC BW analyst (Oct. 8, 2004).

[291] Interview with CIA/DO officials (Aug. 3, 2004); *see also* SSCI at p. 190.

[292] Classified cable traffic (April 2002).

[293] *Id.*

[294] *Id.*

[295] Interview with CIA WINPAC BW analyst (Oct. 8, 2004) (noting that operational traffic was shared with WINPAC, particularly traffic from the CIA/DO's Counterproliferation Division).

[296] Electronic mail from CIA WINPAC BW analyst (Dec. 20, 2002) (summarizing Curveball assessment).

[297] Interview with former CIA WINPAC BW analyst (Nov. 10, 2004).

[298] *Id.*

[299] As noted above, denial refers to the ability to prevent the Intelligence Community from collecting intelligence, and deception refers to the ability to manipulate intelligence with false or misleading information. *See* Department of Defense, *Iraqi Denial and Deception for Weapons of Mass Destruction and Ballistic Missile Programs* (Oct. 8, 2002). Information from 1998 indicated that the Iraqis had broken and then reconstituted part of the wall, which convinced the majority of analysts that the wall was "temporary" and would allow BW trailers through it, thus not contradicting Curveball's reporting. When United Nations Monitoring Verification and Inspection Commission (UNMOVIC) inspectors visited the site on February 9, 2003, they found that the wall was a permanent structure and could find nothing to corroborate Curveball's reporting. Comments from former WINPAC BW analyst (March 3, 2005). Further, when analysts visited the site after OIF, they discovered that, in actuality, the wall was a six foot high solid structure. Interview with WINPAC BW analyst (Nov. 22, 2004). This and other discrepancies in Curveball's information that ultimately led to the conclusion that he was a fabricator are discussed further below.

[300] *See, e.g.*, NIE at p. 41.

[301] Interview with CIA WINPAC analysts (Oct. 8, 2004).

[302] Senior Publish When Ready, *Memorandum to the Secretary of Defense* (Sept. 19, 2001) (emphasis added).

[303] NIE at p. 41.

[304] Classified cable traffic (May 2002) (fabrication notice); *see also* SSCI at p. 151.

[305] Senior Publish When Ready, *Iraq's Expanding BW Capability* (July 13, 2002).

[306] NIE at p. 43.

[307] Interview with CIA/DO chief of the regional division responsible for relations with the

foreign liaison service handling Curveball (hereinafter "Division Chief"), CIA/DO (Jan. 31, 2005).

[308] *Id.*

[309] Interview with CIA/DO Division Chief and former chief of the responsible regional group within the division (hereinafter "Group Chief"), CIA/DO (Dec. 14, 2004); Interview with CIA/DO Division Chief, (Jan. 31, 2005); *see also* Interview with CIA/DO Group Chief, (Feb. 8, 2005). The division chief could not recall the precise date of the lunch.

[310] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with Division Chief, CIA/DO (Jan. 31, 2005); *see also* Interview with CIA WINPAC analysts (Oct. 8, 2004) (stating that the DO's responsible regional division told WINPAC analysts that "even the [foreign service] didn't think Curveball was a good source"); Interview with David Kay (May 26, 2004) (noting that he believed the foreign service had "warned" the CIA about Curveball "before the NIE" was published).

[311] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Division Chief (Jan. 31, 2005). Former DDO Pavitt told the Commission that he had heard that the division chief had been told by the foreign service that the foreign service lacked confidence in Curveball's reporting. Although he could not recall when he learned this information, he thought it was probably "after OIF." Interview with former CIA Deputy Director for Operations James Pavitt (Feb. 7, 2005).

[312] Interview with CIA/DO Division Chief (Jan. 31, 2005); Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Group Chief (Feb. 8, 2005).

[313] Interview with CIA/DO Division Chief (Jan. 31, 2005).

[314] *Id.*

[315] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); *see also* Interview with CIA/DO Group Chief (Feb. 8, 2005). Former DDO Pavitt also stated that he did not understand, prior to the commencement of hostilities with Iraq, that Curveball's reporting was a major basis for the Intelligence Community's judgments about Iraq's BW program. Interview with former Deputy Director for Operations James Pavitt (Feb. 7, 2005).

[316] At the time, DDCI McLaughlin had three executive assistants—one from the Directorate of Operations (hereinafter EA/DDCI from DO) one from the Directorate of Intelligence (hereinafter EA/DDCI from DI) and one from the National Security Agency. Interview with EA/DDCI from DO (Feb. 8, 2005).

[317] Electronic mail from EA/DDCI from DO ("DDCI Iraq WMD Brief") (Dec. 18, 2002); Electronic mail from Group Chief, CIA/DO ("Re: next steps on curve ball") (Dec. 18, 2002).

[318] *Id.*

[319] Interview with EA/DDCI from DO (Feb. 8, 2005).

[320] Electronic mail from EA/DDCI from DO ("DDCI Iraq WMD Brief") (Dec. 18, 2002); Electronic mail from Group Chief, CIA/DO ("Re: next steps on curve ball") (Dec. 18, 2002).

[321] Classified cable traffic (Dec. 2002).

[322] Classified cable traffic (Dec. 2002).

[323] Interview with EA/DDCI from DO (Feb. 8, 2005); Interview with CIA WINPAC BW analyst (Feb. 8, 2005).

[324] Interview with EA/DDCI from DO (Feb. 8, 2005) (noting that it was apparent that "a great deal was beginning to turn on this guy").

[325] Electronic mail from EA/DDCI from DO ("Meeting to Review Bidding on Curveball") (Dec. 19, 2005).

[326] Interviews with former Deputy Director of Central Intelligence John McLaughlin (Feb. 2, 2005 and March 7, 2005).

[327] Electronic mail from Group Chief, CIA/DO ("operational assessment of Curve Ball") (Dec. 19, 2002).

[328] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Group Chief (Feb. 8, 2005).

[329] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004).

[330] Interview with CIA/DO Group Chief (Feb. 8, 2005).

[331] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Group Chief (Feb. 8, 2005); Interview with CIA WINPAC BW analyst (Feb. 8, 2005); Interview with EA/DDCI from DO (Feb. 8, 2005).

[332] Interview with CIA WINPAC BW analyst (Feb. 8, 2005). The other source was the fourth source described above.

[333] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Group Chief (Feb. 8, 2005); Interview with CIA WINPAC BW analyst (Feb. 8, 2005).

[334] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Group Chief (Feb. 8, 2005).

[335] Interview with CIA WINPAC BW analyst (Feb. 8, 2005).

[336] Interview with EA/DDCI from DO (Feb. 8, 2005). At the time of his interview with Commission staff, the executive assistant incorrectly remembered the analyst as actually working for the Directorate of Operations Counterproliferation Division, rather than the Directorate of Intelligence's WINPAC.

[337] *Id.*

[338] Interview with EA/DDCI from DO (Feb. 8, 2005). *See, e.g.*, Classified cable traffic (Oct. 2002) (noting that the foreign service officer responsible for Curveball "noted that CB continued to be a 'handling problem'").

[339] Interview with EA/DDCI from DO (Feb. 8, 2005).

[340] Electronic mail from EA/DDCI from DO ("Proofread") (Dec. 20, 2002).

[341] The WINPAC BW analyst replaced "parked" with "housed." Electronic mail from CIA WINPAC BW analyst ("RE: Proofread") (Dec. 20, 2002).

[342] Electronic mail from EA/DDCI from DO ("Proofread") (Dec. 20, 2002).

[343] *Id.*

[344] *Id.* The WINPAC BW analyst asked, with respect to this last sentence, "[w]hy has the DO not disseminated this information or shared it with the analytical side? Could we please see this new evaluation?" Electronic mail from EA/DDCI from DO ("Proofread") (Dec. 20, 2002).

[345] Interview with EA/DDCI from DO (March 11, 2005).

[346] *Id.*

[347] Interview with former Deputy Director of Central Intelligence John McLaughlin (Feb. 2, 2005).

[348] Interview with former Deputy Director of Central Intelligence John McLaughlin (March 7, 2005).

[349] Interview with CIA/DO Group Chief (Feb. 8, 2005); Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004). The division chief did not recall this meeting during his second interview with the Commission.

[350] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Group Chief (Feb. 8, 2005). Electronic mail from Group Chief, CIA/DO ("operational assessment of Curve Ball") (Dec. 19, 2002).

[351] Interview with CIA/DO Group Chief (Feb. 8, 2005).

[352] Interview with former Deputy Director for Operations James Pavitt (Feb. 7, 2005).

[353] Interview with former Deputy Director for Operations James Pavitt (March 8, 2005).

[354] Interview with former Associate Deputy Director for Operations (March 8, 2005).

[355] *Id.*

[356] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Division Chief (Jan. 31, 2005); Interview with CIA/DO Group Chief (Feb. 8, 2005).

[357] Interview with CIA/DO Group Chief (Feb. 8, 2005).

[358] *Id.* The Group Chief did not recall exactly what editing she did.

[359] Interview with CIA/DO Division Chief (Jan. 31, 2005).

[360] Interview with EA/DDCI from DO (Feb. 8, 2005).

[361] Interview with DO officer responsible for sources and methods protection (Feb. 22, 2005).

[362] Interview with EA/DDCI from DI (Feb. 22, 2005).

[363] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Division Chief (Jan. 31, 2005).

[364] *Id.*

[365] Interview with CIA/DO Group Chief (Feb. 8, 2005).

[366] Interview with former Deputy Director for Operations James Pavitt (Feb. 7, 2005).

[367] Interview with former Deputy Director of Central Intelligence John McLaughlin (Feb. 2, 2005). There was a meeting with the division chief listed on Mr. McLaughlin's official calendar for January 28, 2003. According to Mr. McLaughlin and one contemporaneous document, however, this meeting covered another subject. *Id.*

[368] Interview with former Deputy Director of Central Intelligence John McLaughlin (March 7, 2005).

[369] Classified cable traffic (Jan. 2003).

[370] Classified cable traffic (Jan. 2003).

[371] Interview with CIA/DO Division Chief (Jan. 31, 2005).

[372] Electronic mail from Division Chief ("Re: [Foreign Service] BW Source") (Feb. 3, 2003); *see also* Electronic mail from Group Chief, CIA/DO ("curve ball") (Feb. 3, 2003).

[373] *Id.*

[374] Interview with former Deputy Director of Central Intelligence John McLaughlin (Feb. 2, 2005).

[375] *Id.*

[376] *Id.*; Interview with former Director of Central Intelligence George Tenet (Jan. 25, 2005).

[377] Electronic mail from Executive Officer of the responsible regional division, CIA/DO ("[Foreign Service] BW Source") (Feb. 3, 2003) (forwarding the memorandum).

[378] *Id.*

[379] *Id.*

[380] Interview with former Director of Central Intelligence George Tenet (Jan. 25, 2005).

[381] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004); Interview with CIA/DO Division Chief (Jan. 31, 2005).

[382] *Id.*

[383] *Id.*

[384] *Id.*

[385] Interviews with former Director of Central Intelligence George Tenet (Jan. 25, 2005 and March 10, 2005).

[386] *Id.*

[387] Interview with former CIA WINPAC BW analyst (Nov. 10, 2004); Comments from DOE (March 3, 2005); Comments from INR (March 3, 2005).

[388] Interview with former CIA WINPAC BW analyst (Nov. 10, 2004).

[389] *Id.*

[390] Interviews with former CIA WINPAC BW analyst (Nov. 10, 2004 and Nov. 22, 2004).

[391] Interview with former CIA WINPAC BW analyst (Nov. 10, 2004). The information that Curveball had been out of Iraq during July through December 1998 and left Iraq in March 1999 traveling in true name—in contradiction to his claims—was eventually confirmed by cross-referencing pertinent travel records. The records matched the itineraries supplied by Curveball's family members. *Id*; Comments from former WINPAC BW analyst (March 3, 2005).

[392] Classified intelligence report.

[393] Interview with former CIA WINPAC BW analyst (Nov. 10, 2004). Interviews with Curveball's childhood friends also revealed that he had a reputation as a "great liar" and a "con artist"; his college roommate labeled him a "congenital liar." CIA analysts said that these sentiments appeared to be universal, noting that "people kept saying what a 'rat' Curveball was." *Id.*

[394] Interview with former CIA WINPAC BW analyst (Nov. 10, 2004). One of the WINPAC analysts who conducted the investigations in Iraq noted that other analysts had also shared with David Kay their growing sense of unease with what they were finding (and not finding) in Iraq. According to the analyst, however, CIA management—and some analysts—were still reluctant to retreat from Curveball's information. *Id.*

[395] Interview with former CIA WINPAC BW analyst (Nov. 10, 2004); CIA, Inspector General, *Inspection Report of the DCI Center for Weapons Intelligence, Nonproliferation, and Arms Control (WINPAC) Directorate of Intelligence* (IG 2004-0003-IN) (Nov. 2004) at p. 14.

[396] *Id.*

[397] *Id.*

[398] *Joint CIA-DIA Assessment of [Foreign Service] Source Curveball* (June 7, 2004) at pp. 1-2; *see also* Interview with CIA/DO officials (Aug. 3, 2004); Interview with CIA WINPAC analysts (Aug. 11, 2004).

[399] According to a WINPAC BW analyst, Curveball had described a number of agricultural facilities to the foreign service when it had interviewed him in 2000, including one east of Baghdad at which he claimed to have worked. In 2001, at the request of the handling foreign service, Curveball had made a physical model and drawn detailed sketches of the facility. The sketches showed, "without a doubt," that mobile BW trailers were able to move in and out of the buildings. The facility Curveball described was subsequently identified as Djerf al-Naddaf, which Curveball then confirmed. Analysts noted, however, that there was a wall at the facility that Curveball had not identified. The Iraqis had broken and then reconstituted part of the wall, which convinced the majority of analysts that the wall was "temporary" and would allow BW trailers through it, thus not contradicting Curveball's reporting. As noted, after OIF, analysts learned that the wall was actually a solid, six foot high structure. The fact that Curveball did not know of the wall's existence provided substantial evidence that he had not been at the facility when the wall had been constructed—according to imagery in May 1997. Interview with CIA WINPAC BW analyst (Nov. 22, 2004).

[400] *See, e.g.*, Classified intelligence reporting. As discussed, by the time of CIA's first face-to-face interview with Curveball in March 2004, the Intelligence Community was aware of serious problems with his reporting. The recall notice on this report concluded that the interview with Curveball had revealed: "Discrepancies surfaced regarding the information provided by … [Curveball] in this stream of reporting, which indicate that [Curveball] lost his claimed access in 1995. [Curveball] was unable/unwilling to resolve these discrepancies; our assessment, therefore, is that [Curveball] appears to be fabricating in this stream of reporting." Interview with CIA/DO officials (Sept. 27, 2004).

[401] As noted, Defense HUMINT had disseminated 95 reports from Curveball and six Curveball reports were disseminated in CIA channels. All of these reports were recalled after Curveball was deemed a fabricator. Also, the handling foreign service continues, officially, to stand by Curveball's reporting. Interview with CIA/DO officials (Sept. 27, 2004). Another foreign service had maintained a similar official position until late 2004. *Id.*; Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004).

[402] Interview with CIA/DO officials (Sept. 27, 2004); Interview with former CIA WINPAC BW analyst (Nov. 10, 2004) (noting that when Curveball first requested asylum, he was essentially told to "get in line." He feared being returned to Iraq and subsequently offered information about his work in Iraq in an attempt to speed the asylum process).

[403] Interviews with CIA/DO officials (Aug. 3, 2004 and Sept. 27, 2004); Interview with former CIA WINPAC BW analyst (Nov. 10, 2004).

[404] Interviews with CIA/DO officials (Aug. 3, 2004 and Sept. 27, 2004); Interview with former CIA WINPAC BW analyst (Nov. 10, 2004).

[405] Interview with CIA officials (Dec. 8, 2004).

[406] As described above, reporting from both of these sources was disseminated by DIA. With regard to the second source, although CIA's post-war investigation led it to conclude that the source was being directed by the INC, DIA has not recalled the reporting as of March 3, 2005. Interview with CIA officials (Dec. 8, 2004); Comments from CIA/DO (March 3, 2005);

Comments from DIA (March 8, 2005).

[407] Interview with CIA officials (Dec. 8, 2004). With respect to liaison reporting, however, the Intelligence Community is generally unaware whether those sources may be connected to the INC. *Id.*

[408] NIE at p. 43; Secretary of State Colin Powell, Remarks to the United Nations Security Council (Feb. 5, 2003) ("An Iraqi major who defected confirmed that Iraq has mobile biological research laboratories [and] production facilities.").

[409] CIA and DIA, *Congressional Notification on [the INC source]* (Jan. 27, 2004); Interview with Defense HUMINT official (Nov. 2, 2004). This problem was not discussed in the Senate Select Committee on Intelligence's report.

[410] Interview with CIA/DO officials and CIA Iraq WMD Review Group analysts (Aug. 3, 2004). Although there were other missed opportunities to prevent this information from being used in Secretary Powell's speech, if the reports had been reissued with a recall notice it is likely the error would have been caught.

[411] Classified intelligence report (May 2002) (fabrication notice); *see also* Interview with Defense HUMINT official (Nov. 2, 2004). As a consequence of this failure, reporting from the INC source remained in analysts' databases with no indication that it was considered unreliable.

[412] CIA and DIA, *Congressional Notification on [the INC source]* (Jan. 27, 2004) at p. 3; CIA, *Iraq WMD Lessons Learned* (Aug. 2004).

[413] Interview with CIA/DO officials and CIA Iraq WMD Review Group (Aug. 3, 2004).

[414] SSCI at p. 247.

[415] *Id.* The Defense HUMINT official also cleared several reports for declassification, including the report from the INC source, but told the Senate Select Committee staff that he and the declassification staff did not notice that the report was the same one on which a fabrication notice had been issued. *Id.*

[416] NIE at pp. 9, 28.

[417] *Id.* All of these assessments were made with "high confidence." *Id.* at p. 9.

[418] *Id.* at p. 28.

[419] ISG, *Comprehensive Report of the Special Advisor to the DCI on Iraqi WMD*, Volume III, "Iraq's Chemical Warfare Program" (Sept. 30, 2004) (hereinafter "ISG Report, CW") at p. 1.

[420] *Id.* at p. 2.

[421] *Id.* at p. 3.

[422] *Id.* at p. 1. At least one CIA analyst who worked extensively on pre-war intelligence and with the ISG concluded that, although he "believed" Saddam wanted to reconstitute his CW program, the analyst had seen no "evidence" of Saddam's desire to do so. Interview with CIA CW analyst (Oct. 8, 2004).

[423] Interview with CIA Iraq WMD Review Group analyst (Sept. 23, 2004); Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[424] Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[425] DCI Statement for the Record at Tab 2, p. 1.

[426] *Id*.

[427] CIA, *Iraqi WMD Programs: The Road to Reconstruction* (SW 95-40007CX) (Feb. 3, 1995) at p. 1.

[428] *Id.*

[429] CIA, *Iraq's Remaining WMD Capabilities* (NESA IR 96-40101) (Aug. 26, 1996) at p. 5; *see also* Senior Executive Memorandum (Jan. 12, 2002) (discussing the value of Kamil's information).

[430] Interview with CIA WINPAC CW analyst (Oct. 8, 2004). The ISG Report cites April 1997 as the date for this test. WINPAC and DIA have subsequently indicated that the tests were actually conducted in June 1998. Comments from DIA (citing MID-217-98 (Aug. 17, 1998)); Comments from CIA WINPAC (March 3, 2005). The discrepancy in dates does not affect the analysis.

[431] Subsequent analysis of the samples has been inconclusive. ISG, *Comprehensive Report of the Special Advisor to the DCI on Iraqi WMD*, Volume I, "Regime Strategic Intent" (Sept. 30, 2004) at p. 54. Iraq admitted in its 1996 declaration that it researched VX production routes and had produced pilot-scale quantities of VX but denied that it had conducted large scale production or weaponization of VX. The ISG concluded, however, that Iraq had "weaponized" VX by filling three aerial bombs with VX during the Iran-Iraq war. Interview with CIA WINPAC CW analyst (Oct. 8, 2004); ISG Report, CW at pp. 21, 33. For their part, WINPAC analysts now believe that the VX degradation products found on missile fragments may have been the result of cross-contamination from the filler-lines used to fill these three aerial bombs. Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[432] Interview with CIA Iraq WMD Review Group analyst (Sept. 23, 2004); Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[433] ISG Report, CW at p. 13. Both of these events contributed to Saddam's decision to stop cooperating with United Nations weapons inspectors.

[434] CIA, DCI Nonproliferation Center, *Iraq's Chemical Warfare Program: Status and Prospects* (NPC 98-10005C) (Aug. 1998) at p. iii. Two fall 1998 NIC products reached similar conclusions. NIC, *Outstanding WMD and Missile Issues* (Sept. 15, 1998) at Table 2A; NIC, *Outstanding WMD and Missile Issues* (Nov. 1998).

[435] NIC, *Outstanding WMD and Missile Issues* (Nov. 1998) at p. 2.

[436] NIC, *Iraq: Rebuilding A Chemical Weapons Production Capability* (May 24, 2000).

[437] DCI Statement for the Record at Tab 2, pp. 2-3. UNSCOM had prepared a draft survey of Iraq's chemical industry in 1999, in which UNSCOM judged that Iraq's "philosophy was to develop the chemical industry to a technical level that, in peacetime, could produce for the civilian market (*i.e.*, pesticides) but based on the technical capabilities could also easily be reconfigured to produce key precursors if needed." *Id.* (citing draft survey). The NIC noted that this survey was consistent with Intelligence Community assessments. *Id.* The motivation for Saddam's interest in CW was assessed to be based on "regime preservation, regional esteem, and retaliation capability." *See, e.g.*, CIA, WINPAC/BCG, Briefing for Ambassador Negroponte, *Status of Iraq's CW Program* (May 10, 2002).

[438] NIC, *Iraq: Rebuilding A Chemical Weapons Production Capability* (May 24, 2000); *see also* CIA, WINPAC/BCG, Briefing to John Wolf, Assistant Secretary of State for Nonproliferation, *Status of Iraq's CW Program.* (Aug. 17, 2001); CIA, DCI Nonproliferation Center, *UNMOVIC/IAEA Would Hinder Iraq's WMD Programs* (NPC SIR 2001-001X) (March 30,

2001).

[439] *See, e.g.*, CIA, Publish When Ready, *Iraq: Baghdad Anticipating US Retaliation* (Sept. 20, 2001).

[440] Senior Executive Memorandum (Oct. 23, 2001) (discounting London *Daily Telegraph* reporting that CW were being moved); CIA, *Memorandum for the Secretary of Defense* (Oct. 23, 2001) (same).

[441] Classified intelligence reporting (Nov. 30, 2001).

[442] NIC, *Iraqi Military Capabilities Through 2003* (NIE 99-04/II) (April 1999).

[443] Senior Executive Memorandum (Jan. 5, 2002). The Memorandum cautioned, however, that the Intelligence Community lacked detailed information on many aspects of the CW program. *Id.* Iraq had approximately 500 metric tons of weaponized CW stockpile at the time of Operation Desert Storm. DCI Statement for the Record at Tab 2, p. 9.

[444] Briefing by WINPAC analysts to Principals Committee (July 18, 2002); CIA Iraq WMD Review Group, *Iraq WMD/CW Production Timeline* (undated) at p. 4.

[445] NIE at p. 6. The President's Summary of the NIE did not differ from the language used in the Key Judgments of the Estimate. That summary stated that "Baghdad has begun renewed production of mustard, sarin, GF (cyclosarin), and VX. Although information is limited, Saddam probably has stocked at least 100—and possibly as much as 500—metric tons of CW agents. Iraq has experience in manufacturing CW bombs, artillery rockets, and projectiles, and we assess it has CW bulk fills for short-range ballistic missile (SRBM) warheads." NIC, President's Summary, NIE, *Iraq's Continuing Programs for Weapons of Mass Destruction* (PS/NIE 2002-16HC) (Oct. 2002).

[446] NIE at p. 6.

[447] *Id.* at p. 28. *See also* DCI Statement for the Record at Tab 2, p. 9.

[448] DCI Statement for the Record at Tab 2, p. 9 (elaborating on the factors mentioned in the NIE).

[449] *Id*. (citing NIC, *Iraqi Military Capabilities Through 2003* (NIE 99-04) (April 1999)).

[450] Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[451] NIE at p. 28.

[452] Interview with CIA WINPAC CW analyst (Oct. 8, 2004); *see also* DCI Statement for the Record at Tab 2, p. 3 (Imagery was "critical" to assessments that Iraq had restarted CW production) and *id.* at p. 5 ("*Our assessments about these transshipments became a key element of judgments that Iraq had resumed production of CW agents.*" (emphasis in original)).

[453] DCI Statement for the Record at Tab 2, pp. 3, 7-8; Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[454] Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[455] DCI Statement for the Record at Tab 2, p. 8.

[456] *Id*.

[457] *Id*. *See also* Interview with CIA Iraq WMD Review Group analyst (Sept. 23, 2004) (noting that there were "no good sources on CW"); Interview with CIA CW analyst (Sept. 13, 2004) (noting that there were between 30 and 40 total sources that reported on the existence of CW in Iraq). Again, because of the sheer number of sources that reported on *some* aspect of CW, we do not extensively examine every source. Rather, we confine our in-depth review to

those sources described by the Intelligence Community itself as being the most significant.

[458] DCI Statement for the Record at Tab 2, p. 4 (citing classified intelligence report (Feb. 1999)).

[459] *Id.*

[460] *Id.*

[461] DCI Statement for the Record at Tab 2, p. 5.

[462] *Id.*; *see also* Classified intelligence report (Nov. 2001).

[463] *Id.*; Interview with CIA Iraq WMD Review Group analyst (Nov. 15, 2004). *See also* Butler Report at pp. 100 and 101

[464] Interview with NIO/SNP (May 26, 2004).

[465] *Id.*

[466] NIE at p. 32.

[467] *Id.* at p. 33.

[468] *Id.* at p. 34.

[469] *Id.* at p. 35.

[470] *Id.*

[471] *Id.*

[472] Interview with former CIA WINPAC CW analyst (Nov. 10, 2004).

[473] *Id.*

[474] NIC, *Iraq's Chemical Warfare Capabilities: Potential for Dusty and Fourth-Generation Agents: Memorandum to Holders of NIE 2002-16HC* [the October 2002 NIE] (M/H NIE 2002-16) (Nov. 2002). The *Memorandum* was prepared at the request of the U.S. Central Command as a follow-up to the October NIE and "examine[d] the CW implications for any US-led military operations against Iraq as they relate[d] to" dusty and fourth-generation CW agents. *Id.* (Impetus for *Memorandum to Holders of NIE 2002-16HC*).

[475] A dusty agent is a CW agent "that is combined with an inert carrier … and disseminated as an aerosol." *Id.* at p. 5.

[476] A fourth-generation agent is a highly toxic CW agent that is "more difficult to treat medically than the currently fielded traditional nerve agents." *Id.* at p. 3.

[477] *Id.* at p. 14.

[478] *Id.*

[479] NIC, *Nontraditional Threats to the US Homeland Through 2007* (NIE-2002-15HJ) (Nov. 2002) (published in January 2003) at p. 33.

[480] CIA, WINPAC, *2001 Intelligence Report to Congress on the Chemical Weapons Convention* (CDR 2002-002 HCX) (Dec. 2002) at pp. 51-52.

[481] *Id.* at p. 52.

[482] ISG Report, CW at p. 1.

[483] *Id.* at p. 2.

[484] *Id.* at p. 3.

[485] *Id.* at p. 1. At least one CIA analyst who worked extensively on pre-war intelligence and with the ISG concluded that, although he "believed" Saddam wanted to reconstitute his CW

program, the analyst had seen no "evidence" of Saddam's desire to do so. Interview with CIA CW analyst (Oct. 8, 2004).

[486] ISG Report, CW at p. 123. The majority of ammunition supply points searched were within the assessed "Red Line" surrounding Baghdad and, more specifically, sites which were reported to have a Samarra-type truck or to be near artillery units capable of firing 122 mm multiple rocket launcher or 155 mm CW rounds (both of which the Iraqis were known to have used in the past to deliver CW). In addition, the ISG searched numerous "captured enemy ammunition" depots that included hundreds of thousands of tons of munitions. None of these searches yielded any CW munitions. *Id.* at pp. 34-35.

[487] *Id.* at p. 37. This included the Al-Musayyib Storage Depot site. *Id.*

[488] *Id.* at p. 123.

[489] *Id.* at p. 1.

[490] *Id.* at p. 12.

[491] *Id.* at p. 14. The one exception noted by the ISG was a single scientist who said that he was approached in 2003 by "Uday's officer" with a request to make "a chemical agent." *Id.* at p. 15.

[492] NIE at p. 32.

[493] ISG Report, CW at pp. 24-25.

[494] *Id.* at p. 24. The ISG also concluded that management of chemical facilities by "previously identified CW personnel" could be attributed to Iraq's command economy and not to illicit purposes. *Id.* at p. 15.

[495] *Id.* at p. 16. In attempting to determine whether Iraq's chemical infrastructure was intended for legitimate or illicit purposes, the ISG generally considered the commercial utility of certain chemicals or processes, Iraq's historical use of chemicals and processes for CW purposes, and the availability of CW expertise necessary for CW production. *Id.* at pp. 15, 18-22.

[496] *Id.* at p. 13.

[497] *Id.* at p. 11.

[498] *Id.* at p. 29. The ISG offered several possible explanations, including unilateral destruction of CW munitions, the loss of munitions when they were forward-deployed in anticipation of a conflict, and the possibility that some pre-1991 munitions remained in storage areas. *Id.* at pp. 27-33, 97.

[499] *Id.* at pp. 29-30. The ISG recovered a total of 53 chemical munitions from various sources and military units throughout Iraq. The ISG concluded that these munitions were part of Iraq's pre-1991 CW program. *Id.* at p. 30.

[500] *Id.* at p. 107.

[501] *Id.* at pp. 109-110.

[502] *Id.* at p. 110.

[503] *Id.* at p. 43. The ISG also rejected the theory that the labs were used to maintain technical expertise because their work was limited to laboratory-scale production. *Id.* at p. 44.

[504] Interview with CIA WINPAC CW analyst (Oct. 8, 2004); *see also* DCI Statement for the Record at Tab 2, p. 3 (imagery was "critical" to assessments that Iraq had restarted CW production) and *id.* at p. 5 ("*Our assessments about these transshipments became a key element of judgments that Iraq had resumed production of CW agents.*" (emphasis in original)).

[505] *Id.* (citing NIC, *Iraq, Unusual Logistical Activities In Preparation for an Anticipated US-Led Campaign* (ICB 2002-09) (May 2, 2002)).

[506] DCI Statement for the Record at Tab 2, p. 8.

[507] *Id.* The Samarra truck, a modified Mitsubishi water tanker truck, was confirmed by UNSCOM inspections and Iraqi statements in 1991 to have been used as a decontamination truck, although it was never clear that all Mitsubishi-manufactured water tanker trucks owned by the Iraqis were used in this manner. In addition, these Samarra type trucks escorted known shipments of CW material from the Samarra CW Complex in the 1980s to places such as Kirkuk Airfield, from where Iraqi Air Force planes launched CW strikes into Kurdistan. Comments from NGA (March 3, 2005).

[508] Interview with CIA WINPAC CW analyst (Oct. 8, 2004) (noting that the conclusion that the transshipments involved CW was "a kind of catalyst" for broader conclusions about the status of Iraq's CW program). Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[509] NGA, *Reassessment of Activity at Al Musayyib Barracks Brigade Headquarters and Ammunition Depot, 1998-2004* (June 15, 2004) (hereinafter "NGA Reassessment"); Comments from NGA (March 3, 2005). The Al Musayyib imagery was that referred to by Secretary of State Colin Powell during his pre-war address to the United Nations Security Council; *see also* Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[510] NGA Reassessment at p. 1.

[511] *Id.* at pp. 3, 6.

[512] *Id.* at pp. 8-9. "Grading" is the changing of the ground level to a smooth or slightly sloping surface. It can be used to facilitate the run-off of liquid from a surface.

[513] *Id.* at p. 8.

[514] DCI Statement for the Record at Tab 2, p. 8.

[515] NGA Reassessment at pp. 5, 7-8.

[516] *Id.* at p. 8.

[517] *Id.* at p. 1. Although analysts also relied on a small number of human source and signals intelligence reporting, the "critical" factor in their analysis was the transshipment activity seen on imagery.

[518] Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[519] *Id.*

[520] Collection Concepts Development Center Study, *Iraqi Weapons of Mass Destruction: Recommendations for Improvements in Collection (Study One)* (June 29, 2000) at p. 10.

[521] *Id.*

[522] NGA, *Analysis of Iraq's Weapons Programs* (provided to Commission Nov. 16, 2004); Interview with NGA officials (Nov. 16, 2004); Interview with CIA WINPAC CW analyst (Oct. 8, 2004) (noting that analysts saw increased activity at depots); *see also* DCI Statement for the Record at Tab 2, p. 7 (noting that the "first indication" of CW transshipments came in March 2002 based on imagery); *id.* at Tab 2, p. 8 (noting that "[t]he scope of [the transshipment] activity was far too great" to be movement of residual CW stocks).

[523] Interview with NGA officials (Nov. 16, 2004); Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[524] *Id.* WINPAC CW analysts explained in March 2005 that they had also seen a drop off in

activity in late 2002 despite the increased volume of imagery collection, and this drop off suggested that the apparent *increased* transshipment activity seen in spring 2002 was not "solely a function of collection frequency." Comments from CIA WINPAC (March 3, 2005).

[525] NGA Reassessment at p. 2.

[526] DCI Statement for the Record at Tab 2, p. 4.

[527] Classified intelligence report. The source reported that Saddam Hussein sought a weapon that would "combine two or more of the three capabilities: chemical, biological, nuclear into a single weapon." *Id.* According to analysts, a "combination" device was infeasible because a nuclear yield would destroy any CW or BW agent. Interview with CIA Iraq WMD Review Group analyst (Sept. 13, 2004).

[528] Classified intelligence report. The production of "tons" of agent in mobile labs was unlikely because of the estimated capacity of any possible mobile production facility. Interview with CIA Iraq WMD Review Group analyst (Sept. 13, 2004).

[529] DCI Statement for the Record at Tab 2, p. 4.

[530] Interview with CIA Iraq WMD Review Group analyst (Sept. 13, 2004).

[531] DCI Statement for the Record at Tab 2, p. 4.

[532] Interview with CIA Iraq WMD Review Group analyst (Sept. 13, 2004) (reporting recalled in February 2004); *see also* DCI Statement for the Record at Tab 2, p. 4, n. 13.

[533] Interview with CIA Iraq WMD Review Group analyst (Sept. 13, 2004) (citing classified cable traffic (Sept. 1999)).

[534] *Id.*; (noting that a CIA case officer who interviewed him in March 2003 characterized him as an "information peddler"); *see also* Classified cable traffic (Jan. 2003).

[535] DCI Statement for the Record at Tab 2, p. 4.

[536] Interview with CIA Iraq WMD Review Group analyst (Sept. 13, 2004). Despite this long history, reporting similar to the Iraqi chemist's—although not confirmed as his—appeared via DIA channels in December 2002 and July 2003, and has not since been reevaluated. While it is unclear whether the chemist is in fact the source of this information, we are not aware of any efforts by DIA to determine whether or not he is, and as a consequence, whether the reporting should be recalled.

[537] DCI Statement for the Record at Tab 2, p. 5. Comments from Iraq WMD Review Group (March 3, 2005).

[538] CIA, *Iraq WMD Lessons Learned* (Aug. 2004) at p. 25.

[539] *Id.*; *see also* Interview with David Kay (May 26, 2004) (noting compartmentation within WMD programs); Interview with representatives of the ISG (May 26, 2004) (same).

[540] In a 2004 review of this source's reporting, analysts concluded that his credibility was questionable, because of the probability that he would not have access to information on such disparate topics. DCI Statement for the Record at Tab 2, p. 5, n. 14; *see also* CIA, *Iraq WMD Lessons Learned* (Aug. 2004) at p. 25.

[541] Interview with CIA Iraq WMD Review Group analysts (Feb. 2, 2005).

[542] Classified intelligence report (March 2002).

[543] DCI Statement for the Record at Tab 2, p. 4; *see also* Interview with CIA WINPAC CW analyst (Oct. 8, 2004). Analysts should have been further alerted by the source description, which cautioned that "[w]hile source has reported reliably in the past, reporting reliability can-

not be confirmed regarding *domestic Iraqi activities*." Classified intelligence report (March 2002) (emphasis added).

[544] DCI Statement for the Record at Tab 2, p. 4.

[545] Interview with CIA CW analyst (Oct. 8, 2004). An analyst who was not directly involved with Iraq WMD issues before the war said after OIF that she would have "discounted" the report because of the obvious technical inconsistency. *See* Interview with CIA Iraq WMD Review Group analyst (Sept. 23, 2004).

[546] Butler Report at pp. 100 and 101.

[547] Interview with NIO/SNP (May 26, 2004). This report was distributed to a very small group of senior officials prior to the publication of the NIE—including the NIE's principal author—but it was not made available to most analysts. *Id.*

[548] NIE at p. 7. The NIE assessed that the UAVs could also be used for CW delivery, although that was judged less likely. *Id.* at p. 49.

[549] The Air Force dissented, concluding that Iraq was developing UAVs primarily for reconnaissance rather than for BW or CW delivery. NIE at pp. 7, 52.

[550] NIE at pp. 51-52.

[551] Interview with CIA WINPAC UAV analyst (Aug. 11, 2004).

[552] *Id.*

[553] NIE, *Nontraditional Threats to the US Homeland Through 2007* (NIE-2002-15HJ) (Nov. 2002) (published January 2003).

[554] CIA, Memorandum for Chairman of the House Permanent Select Committee on Intelligence Porter Goss, Title Classified (March 6, 2003) (cited in timeline provided by CIA Iraq WMD Review Group analyst (Sept. 9, 2004)).

[555] ISG, *Comprehensive Report of the Special Advisor to the DCI on Iraqi WMD*, Volume II, "Delivery Systems" (Sept. 30, 2004) (hereinafter "ISG Report, Delivery Systems") at pp. 42, 52.

[556] *Id.* at p. 51.

[557] *Id.* at p. 56.

[558] *Id.* at pp. 51-52, 56.

[559] *Id.* at pp. 48, 50.

[560] *Id.* at pp. 7, 52 (stating that Iraq had tested the liquid-propellant al-Samoud variant beyond 150 km, and that the solid-propellant Ababil-100 was capable of flying over 150 km).

[561] NIE at pp. 7, 52, 54.

[562] ISG Report, Delivery Systems at pp. 5, 9-10, 17-18. Because the pre-war assessments regarding Iraq's ballistic missile programs were largely accurate, this study will focus on the Intelligence Community's assessment of the role of UAVs as delivery systems.

[563] Classified intelligence report; UNSCOM, *Final Inspection Report* (190/CBW-4) (June 13-18, 1997) (attached in annotated version of DCI Statement for the Record at Tab 4, p. 1); *see also* DCI Statement for the Record at Tab 4, p. 1. The converted MiG-21s would be fitted with drop tanks filled with BW agent and flown as Remotely Piloted Vehicles (RPVs). UNSCOM, *Final Inspection Report* (190/CBW-4) (June 13-18, 1997).

[564] Classified intelligence report; UNSCOM, *Final Inspection Report* (190/CBW-4) (June

13-18, 1997)).

[565] Classified intelligence reporting; UNSCOM, *Final Inspection Report* (190/CBW-4) (June 13-18, 1997).

[566] Classified intelligence reporting; *see also* DCI Statement for the Record at Tab 4, p. 1.

[567] Classified intelligence reporting; *see also* DCI Statement for the Record at Tab 4, pp. 1, 3; SSCI at p. 221.

[568] Classified intelligence report; UNSCOM, *Final Inspection Report* (190/CBW-4) (June 13-18, 1997); *see also* SSCI at p. 221.

[569] Classified intelligence reporting; *see also* DCI Statement for the Record at Tab 4, p. 1.

[570] Classified intelligence reporting; *see also* DCI Statement for the Record at Tab 4, pp. 1, 3.

[571] Classified intelligence reporting; *see also* DCI Statement for the Record at Tab 4, p. 2.

[572] Classified intelligence report; *see also* DCI Statement for the Record at Tab 4, pp. 2-3.

[573] SSCI at p. 216 (citing annual Intelligence Community assessments of foreign missile developments and ballistic missile threat through 2015); *see also* Classified intelligence report; DCI Statement for the Record at Tab 4, pp. 1-2.

[574] *See, e.g.*, Senior Executive Memorandum, *In Response to Questions On Iraqi Efforts to Produce UAVs for BCW Delivery and On Iraqi Procurement of UAV-related Equipment* (June 15, 2002) (various sources "lead us to conclude that Iraq is trying to produce UAVs in order to deliver CBW agents").

[575] DCI Statement for the Record at Tab 4, pp. 1-3; *see also* Interview with CIA WINPAC analysts (Aug. 11, 2004).

[576] CIA, NPC, *Intelligence Community Assessment of Residual Iraqi Weapons of Mass Destruction* (Sept. 1992); *see also* DCI Statement for the Record at Tab 5, p. 1.

[577] DCI Statement for the Record at Tab 5, p. 1.

[578] *Id.*

[579] *Id.* at p. 2.

[580] *Id.* at p. 3.

[581] NIE at pp. 7, 52. The Director of Air Force Intelligence judged that Iraq was developing these UAVs "primarily for reconnaissance rather than [as] delivery platforms for [CW or BW] agents." The Air Force noted that [CW or BW] delivery is "an inherent capability of UAVs but probably is not the impetus for Iraq's recent UAV programs." *Id.* at p. 52. While the NIE did not actually say—as the Air Force dissent suggests—that the UAVs were "primarily" for [CW or BW] delivery, this potential use was the overwhelming focus of the document's discussion on the UAVs; as the NIC would later acknowledge, "little, if any, attention was given…to missions other than those associated with WMD delivery." DCI Statement for the Record at Tab 4, p. 5.

[582] NIE at pp. 7, 51-52.

[583] *Id.*; *see also* Interview with CIA WINPAC UAV analyst (Aug. 11, 2004).

[584] NIE at p. 52.

[585] *Id.*; DCI Statement for the Record at Tab 4, p. 5.

[586] Classified intelligence reporting (describing crash of L-29 in October 2000); *see also* DCI Statement for the Record at Tab 4, pp. 2-3.

[587] Classified intelligence report (noting that in 1992 Iraq had approximately 10 drones "designed and produced" to deliver BW agents).

[588] Classified intelligence reporting; SSCI at pp. 222-223 (describing five intelligence reports).

[589] Classified intelligence report (Jan. 1998); *see also* SSCI at p. 223.

[590] DCI Statement for the Record at Tab 4, pp. 1-2. This conclusion was bolstered by reporting suggesting that the UAV may have been armed with BW agents. *Id.* at p. 2 (citing classified intelligence reporting).

[591] Classified intelligence reporting.

[592] Classified intelligence report; *see also* SSCI at pp. 225-226.

[593] NIE at p. 7.

[594] SSCI at pp. 226-227 (quoting written response of CIA WINPAC to a question from the Committee about the Intelligence Community's analysis of UAVs); *see also* Interview with CIA WINPAC UAV analysts (Aug. 11, 2004).

[595] With respect to the assessments of other Western intelligence services, the British Joint Intelligence Committee assessed in March 2002 that Iraq was developing a UAV—specifically, that Iraq was modifying a small jet trainer, the L-29, to be used as a UAV—that could have BW and CW delivery applications. *See* Butler Report at pp. 84, 171. The Australian Defense Intelligence Organization (DIO), however, doubted Iraq's ability to disperse chemical and biological agents using UAVs. *See* Australian Parliamentary Joint Committee on ASIO, ASIS and DSD, *Intelligence on Iraq's Weapons of Mass Destruction* (Dec. 2003) at pp. 62-63.

[596] NIE at p. 7.

[597] Interview with CIA WINPAC UAV analyst (Aug. 11, 2004); *see also* SSCI at p. 227; DCI Statement for the Record at Tab 4, p. 4. The first indication that the UAVs might be used to target the U.S. surfaced in the summer of 2001, following the attempted procurement.

[598] NIE at p. 52.

[599] DCI Statement for the Record at Tab 4, p. 3.

[600] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004); Classified intelligence reporting (Sept. 2002).

[601] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004); Classified cable traffic (March 2002).

[602] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004) (citing finished intelligence pieces, *e.g.*, ICA, 2002-05HC (July 2002) at p. 19).

[603] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004) (citing finished intelligence); *see also* NESAF IA 2002-20113 CXH at p. 12.

[604] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004); *see also* Classified cable traffic (Sept. 2002); Classified cable traffic (Oct. 2002).

[605] *Id.* Moreover, when the distributor notified the procurement agent in March 2002 that he could not obtain U.S.-mapping software, he responded, "I don't think they'd be interested in that." Classified cable traffic (July 2002); *see also* Classified cable traffic (Sept. 2002); Classified cable traffic (Oct. 2002).

[606] Interview with CIA WINPAC analysts (Aug. 11, 2004); Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004).

[607] Interview with CIA WINPAC analysts (Aug. 11, 2004).

[608] DCI Statement for the Record at Tab 4, p. 4; *see also* Interview with CIA WINPAC UAV analyst (Aug. 11 2004); Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004).

[609] Interview with CIA WINPAC analysts (Aug. 11, 2004); *see also* Interview with NIO/SNP (Sept. 20, 2004).

[610] NIE at pp. 7, 52.

[611] The unclassified version of the NIE, however, dropped the reference to the Air Force and rephrased the assessment to state that "Iraq maintains…several deployment programs, including for a UAV most analysts believe probably is intended to deliver biological warfare agents." *See* Unclassified NIE at p. 2. According to the NIO/SNP, the unclassified paper contained alternative views but did not identify the holders thereof, following longstanding practice. The NIO/SNP noted that the practice was in the process of being revised. Interview with NIO/SNP (Sept. 20, 2004). The unclassified version of the NIE also indicated a difference of opinion about the aluminum tubes, although it did not attribute the opinions to specific agencies. Unclassified NIE at p. 1.

[612] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004) (citing CIA paper prepared for the NSC, *Iraq's WMD* (Jan. 16, 2003); *see also* Classified intelligence report (recalled in October 2004); Written Response by CIA Iraq WMD Review Group (Feb. 25, 2005).

[613] *Id.* (quoting testimony).

[614] Interview with CIA WINPAC UAV analyst (Aug. 11, 2004).

[615] Interview with former CIA WINPAC analyst (Oct. 25, 2004); President George W. Bush, Remarks by President on Iraq at Cincinnati Museum Center (Oct. 7, 2002).

[616] Interview with CIA Iraq WMD Review Group analyst (Sept. 9, 2004).

[617] NIE, *Nontraditional Threats to the US Homeland Through 2007* (NIE-2002-15HJ) (Nov. 2002) (published in January 2003). The President's Summary of the Nontraditional Threats NIE was also phrased in terms of capabilities rather than intent, but that summary described Iraq as having "at least one small UAV that could be launched from a ship to dispense biological agents on the U.S." NIC, President's Summary of the NIE, *Nontraditional Threats to the US Homeland Through 2007* (PSNIE-2002-15HJ) (Nov. 2002) (published Jan. 2003). The President's Summary also noted that Saddam probably would attempt clandestine attacks against the United States if "ongoing military operations risked the imminent demise of his regime, or for revenge." The INR dissent was included in the Summary, and that dissent noted that Saddam is "unlikely to conduct clandestine attacks against the U.S. Homeland even if the regime's demise is imminent." Another NIE, NIC, *Foreign Ballistic Missile Developments and the Threat Through 2015* (M/H NIE 2001 19HJ/I) (dated 2002 but published in February 2003), uses the same language.

[618] CIA, Memorandum for Chairman of the House Permanent Select Committee on Intelligence Porter Goss, Title Classified (March 6, 2003) (cited in timeline provided by CIA Iraq WMD Review Group analyst (Sept. 9, 2004)).

[619] *Id.*

[620] CIA, *Iraq's Ballistic Missiles and Long-Range Rockets* (WINPAC IA 2003-017) (March 19, 2003) at p. 3.

[621] *Id.* (describing the al-Samoud II, which had a slightly larger diameter than the al-

Samoud but was otherwise almost identical); *see also* Interview with CIA WINPAC missile analyst (Oct. 8, 2004); CIA, *U.S. Analysis of Iraqi's Declaration* (Dec. 7, 2002).

[622] ISG Report, Delivery Systems at p. 52.

[623] *Id.* at pp. 4, 44.

[624] *Id.* at pp. 5, 44.

[625] *Id.* at pp. 45-46.

[626] *Id.* at p. 46.

[627] *Id.* at p. 42.

[628] *Id.* at pp. 46-47.

[629] *Id.* at pp. 48, 51-52.

[630] *Id.* at pp. 51-52.

[631] *Id.* at p. 48.

[632] *Id.*

[633] *Id.*

[634] *Id.* at pp. 52-53.

[635] *Id.* at p. 56.

[636] *Id.*

[637] *Id.*

[638] *Id.* at pp. 48, 50. The ISG report notes that Iraq purchased four MP2000 and two 3200VP autopilots through the procurement agent. According to reporting, the procurement agent was seeking both the MP2000 and 3200VG autopilots along with the mapping software. *See* Classified intelligence report (Aug. 2001); Classified intelligence report (Sept. 2004).

[639] ISG Report, Delivery Systems at p. 50.

[640] *Id.* at pp. 10, 17-18.

[641] *Id.* at p. 9.

[642] The Intelligence Community inaccurately assessed that Iraq retained up to a dozen Scuds or Scud-variant missiles from the original force of 819 missiles, based on accounting discrepancies. NIE at p. 7. The ISG concluded, based on documentary evidence not previously disclosed, that Iraq had either expended or destroyed all of its Scud missiles by 1991. ISG Report, Delivery Systems at p. 9. The Community also learned in December 2002, from Iraq's declaration to the United Nations, that Iraq had another al-Samoud variant that also flew over 150 km. CIA, *U.S. Analysis of Iraqi's Declaration* (Dec. 7, 2002).

[643] NIE at p. 52.

[644] SSCI at pp. 235-236 (making same observation).

[645] Interview with CIA WINPAC UAV analysts (Aug. 11, 2004).

[646] Senior Executive Memorandum, *In Response to an Inquiry About What the Iraqis Are Likely to Disclose If They Use the U.S. and British "White Papers" as a Guide* (Nov. 27, 2002).

[647] NIE at p. 7.

[648] ISG Report, Delivery Systems at p. 9.

[649] Interview with CIA WINPAC analysts (Oct. 8, 2004) (noting analysts learned about the new missile from Iraq's December 2002 Declaration to the United Nations); *see also* CIA,

*Iraq's Ballistic Missiles and Long-Range* Rockets (WINPAC IA 2003-017) (March 19, 2003) at p. 3.

[650] Interview with National Intelligence Officer for Near East and South Asia (hereinafter "NIO/NESA") (Nov. 8, 2004); Interview with former Assistant Secretary of State for Intelligence and Research (Nov. 1, 2004).

[651] *Id.* The NIO/NESA explained that there was very little information available on the intentions of Iraq's senior leadership, and he did not know what analytical process, other than sheer speculation, could have led analysts to the conclusion that Iraq had abandoned its WMD programs. Interview with NIO/NESA (Nov. 8, 2004).

[652] ISG, *Comprehensive Report of the Special Advisor to the DCI on Iraqi WMD*, Volume I, Regime Strategic Intent (Sept. 30, 2004) at p. 46 (hereinafter "ISG Report, Regime Strategic Intent").

[653] *Id.*

[654] *Id.* at p. 34.

[655] NIC, *Prospects for Iraq: Saddam and Beyond* (NIE 93-42) (Dec. 1993); *see also* Interview with NIO/NESA (Nov. 8, 2004) (analysts were "flying blind" when attempting to characterize regime intentions); SSCI at p. 369 (lack of intelligence on Saddam's intentions was a "constant theme" among analysts after 1991).

[656] NIC, *Iraq: Saddam Husayn's Prospects for Survival Over the Next Year* (SNIE 36.2-91) (Sept. 1991) at p. v, n. 1 (INR and Treasury assessed that the Intelligence Community lacked sufficient information to support a firm judgment on Saddam's prospects for survival).

[657] *Id.* at p. viii (Key Judgments).

[658] *Id.* at pp. viii-ix.

[659] NIC, *Saddam Husayn: Likely to Hang On* (NIE 92-7) (June 1992) at pp. iii, 4.

[660] NIC, *Prospects for Iraq: Saddam and Beyond* (NIE 93-42) (Dec. 1993) at pp. 1, 2, 5, 14.

[661] *Id.* at p. 1. Another assumption underlying the analysis was that "Saddam Husayn will not alter his basic domestic and foreign policy goals: to maintain his hold on power by any means necessary,…[and] to rebuild Iraq's military might—including weapons of mass destruction programs." *Id.*

[662] NIC, *Iraq: Likelihood of Renewed Confrontation* (SE 95-8) (June 27, 1995) at p. 2; *see also* CIA, *No Rest for Iraq's Weary* (NESA IR 95-40122) (June 20, 1995) (noting that there was rampant poverty and widespread crime and corruption in Iraq, and that the government was doing little to alleviate the suffering).

[663] NIC, *Iraq: Likelihood of Renewed Confrontation* (SE 95-8) (June 22, 1995) at p. 4.

[664] *Id.*

[665] *Id.* at p. 1.

[666] *Id.* at p. 2.

[667] NIC, *Iraq: Regime Prospects for 1997* (ICB 96-3C) (Dec. 26, 1996) at p. 1.

[668] *Id.* at pp. 1, 3; *see also* NIC, Title Classified (ICB 97-16) (July 22, 1997); NIC, *U.S. Position Eroding Sharply in the Middle East* (NIC 1738-98) (March 20, 1998) (anti-American sentiment among Arab publics had caused U.S. political standing to plummet, increasing Arab expectations for a formal end to sanctions).

[669] *Id.*

[670] *Id.* at pp. 1-2; *see also* NIC, *Iraq: Regime Prospects for 1997* (ICB 96-3C) (Dec. 26, 1996) at pp. 1, 5.

[671] NIC, *Iraq: Prospects for Confrontation* (ICB 98-21) (July 18, 1998) at p. 2. *See also* NIC, *Iraq: Saddam's Next Moves* (SOCM 99-4) (March 2, 1999) (noting an increasing risk that Saddam would "act impulsively" to regain the initiative and attention in the wake of mounting frustration over unmet demands to lift sanctions).

[672] NIC, *Iraq: Prospects for Confrontation* (ICB 98-21) (July 18, 1998) at p. 3.

[673] Interview with NIO/NESA (Nov. 8, 2004).

[674] CIA, *Iraq-United States: Hardening Stance Toward UNSCOM* (NESA IM 96-20005) (Aug. 9, 1996).

[675] CIA, *Iraqi Denial and Deception Against International Inspection Regimes* (OTI IA 2002-169-CHX) (Oct. 7, 2002) ("Iraq's apparent willingness to agree to a resumption of inspections in part reflects confidence in its ability to prevent the international community from discovering the extent of its current and past weapons-related activities.").

[676] CIA, *Iraq: Saddam Maneuvering to Survive 2002* (NESAF IA 2002-20024C) (Feb. 15, 2002) at p. 1.

[677] *Id.* at p. i.

[678] *Id.* at p. 2.

[679] CIA, *Iraqi War Crimes: Saddam Husayn al-Tikriti* (NESAF IR 2001-40064JX) (April 3, 2001) (analyzing Saddam's decision making processes); Interview with NIO/NESA (Nov. 8, 2004) (noting difficulty in obtaining information on regime decisionmaking).

[680] *Id.*

[681] NIC, *Iraqi Military Capabilities Through 2003* (NIE 99-04/II) (April 1999).

[682] CIA, *Iraqi War Crimes: Saddam Husayn al-Tikriti* (NESAF IR 2001-40064JX) (April 3, 2001) at pp. 1-2.

[683] *Id.*

[684] *Id.* at p. 2.

[685] NIC, *Iraqi Military Capabilities Through 2003* (NIE 99-04/II) (April 1999); *see also* Interview with NIO/NESA (Nov. 8, 2004).

[686] NIC, *The Gulf Crisis: Implications of War, A Peaceful Solution, or Stalemate for the Middle East* (SNIE 36/39-91) (Jan. 1991) at p. iii (Saddam Hussein undeterred from his goal of regional supremacy); NIC, *Prospects for Iraq: Saddam and Beyond* (NIE 93-42) (Dec. 1993) (noting that one of the assumptions underlying the Estimate was that Saddam would not alter his long-term goal of making Iraq a dominant regional power); NIC, *Iraq: Prospects for Confrontation*. (ICB 98-21) (July 17, 1998) at p. 2 (Saddam's long-term goal of reasserting regional dominance); NIC, *Iraqi Military Capabilities Through 2003* (NIE 99-04/II) (April 1999) (Iraq's fundamental goals remained unchanged and included regional domination).

[687] NIC, *Prospects for Iraq: Saddam and Beyond* (NIE 93-42) (Dec. 1993) at p. 1.

[688] NIC, *Iraqi Military Capabilities Through 2003* (NIE 99-04/II) (April 1999) at p. 6.

[689] NIC, *Stability of the Iraqi Regime: Significant Vulnerabilities Offset by Repression* (ICA 2002-02HC) (April 2002) at p. 5.

[690] NIC, *Iraqi Military Capabilities Through 2003* (NIE 99-04/II) (April 1999) at p. 5 (noting assessment was unchanged from previous NIEs in 1994 and 1995).

[691] NIC, *Iraq: Prospects for Confrontation* (ICB 98-21) (July 17, 1998) at p. 2; *see also* NIC, *Prospects for Iraq: Saddam and Beyond* (NIE 93-42) (Dec. 1993) (achieving goal of regional dominance required rebuilding military might, including WMD).

[692] Interview with NIO/NESA (Nov. 8, 2004) (the dearth of information made any analysis of Iraqi political calculations largely speculative, and analysts therefore relied on historical information and observed behavior).

[693] ISG Report, Regime Strategic Intent at p. 42.

[694] ISG, Transmittal Message to *Comprehensive Report of the Special Advisor to the DCI on Iraqi WMD* (Sept. 23, 2004) at p. 8.

[695] ISG Report, Regime Strategic Intent at p. 34. Iraq's invasion of Kuwait led to the immediate imposition of comprehensive and mandatory trade and financial sanctions under United Nations Security Council Resolution (UNSCR) 661. These sanctions remained in place after the ceasefire of February 28, 1991. UNSCR 687 of April 3, 1991 created UNSCOM and required Iraq's WMD disarmament. UNSCR 687 explicitly linked Iraq's WMD disarmament to Iraq's right to resume oil exports; the withdrawal of wider sanctions was also dependent on this step. UNSCR 715, passed on October 11, 1991, required Iraq's unconditional acceptance of ongoing inspections to monitor and verify Iraq's compliance with UNSCR 687. *Id.*

[696] *Id*. at p. 46.

[697] *Id.* at p. 44.

[698] *Id.* at p. 46.

[699] Interview with Special Advisor to the Director of Central Intelligence Charles Duelfer (Oct. 13, 2004).

[700] ISG Report, Regime Strategic Intent at p. 1.

[701] *Id.* at pp. 7, 70.

[702] *Id.* at pp. 11, 12.

[703] *Id.* at pp. 8-9.

[704] *Id.* at p. 34.

[705] *Id*.

[706] *Id.* at p. 41.

[707] *Id*. at p. 47.

[708] *Id*.

[709] *Id.* at p. 48.

[710] *Id.* at p. 34.

[711] *Id.* at p. 49.

[712] *Id.* at pp. 57-58.

[713] *Id.* at pp. 56-57, 60.

[714] *Id.* at p. 65.

[715] *Id.*

[716] *Id.* at pp. 65-66.

[717] Although the Senate Select Committee on Intelligence's report discussed some of the pre-war analytical products regarding Iraq's threat to regional security, the Committee did not have the benefit of the ISG report and therefore did not discuss the discrepancies between the

pre-war assessments of the political dynamics within the Iraqi regime and the post-war findings in that regard. *See generally* SSCI at pp. 367-390.

[718] Interview with Special Advisor to the Director of Central Intelligence Charles Duelfer (Oct. 13, 2004).

[719] ISG Report, Regime Strategic Intent at pp. 11, 65. One senior Iraqi official told the ISG that he was not certain whether Saddam's statement that Iraq had no WMD was true, given the U.S. government's belief that Iraq did have such weapons. *Id.* at p. 62.

[720] Interview with NIO/NESA (Nov. 8, 2004); Interview with NIO/SNP (Sept. 20, 2004). The former Assistant Secretary of State for Intelligence and Research noted that he had discussed this possibility with other senior administration officials before Operation Iraqi Freedom began, but that ultimately they had rejected the possibility. They rejected it because they thought Saddam would have no reason not to come clean with the inspectors if he had truly disarmed. Although they considered the possibility that Saddam's behavior could be explained by his pride, as well as by his desire to intimidate and deter his adversaries by allowing them to think he had WMD, they ultimately rejected that theory. Interview with former Assistant Secretary of State for Intelligence and Research (Nov. 1, 2004).

[721] Interview with NIO/NESA (Nov. 8, 2004).

[722] *See, e.g.*, NIC, *Iraq: Saddam Husayn's Prospects for Survival Over the Next Year* (SNIE 36.2-91) (Sept. 1991) at p. xi (this assessment, prepared shortly after the end of the Gulf War, assumed that Saddam would not fully comply with United Nations resolutions and that sanctions would remain in effect); NIC, *Prospects for Iraq: Saddam and Beyond* (NIE 93-42) (Dec. 1993) at p. 1 (identifying as an assumption that Saddam would not fully comply with United Nations resolutions); NIC, *Iraq: Prospects for Confrontation* (ICB 98-21) (July 18, 1998) at p. 3 (stating that "Saddam does not intend to fully comply with relevant Security Council resolutions").

[723] Interview with NIO/NESA (Nov. 8, 2004) (noting the dearth of political reporting).

[724] Some reporting indicated that Iraq may have moved biological and chemical weapons stockpiles to Syria just prior to the start of the war in March 2003. CIA, Title Classified (Dec. 13, 2004) (citing one classified intelligence report (March 2003) from a foreign service). The security situation along the border between Iraq and Syria prevented the ISG from conclusively ruling out the possibility that such weapons were transported across the border. Interview with Special Advisor to the Director of Central Intelligence Charles Duelfer (Oct. 13, 2004). It is important to note, however, that, given the overall findings of the ISG, there was nothing left to move by March 2003, save possibly some pre-1991 CW shells. Therefore, the conclusion that militarily significant stockpiles of CW or BW could *not* have been moved to Syria just before the war necessarily follows from the ISG's overall findings about the state of Iraq's WMD programs after 1991.

[725] NIC, *Current Iraqi WMD Capabilities* (NIC-1848-98) (Sept. 30, 1998) at p. 1.

[726] *Id.*

[727] Interview with former senior administration official.

[728] SSCI at pp. 260-261; *see also* Interview with CIA/DO officials (Sept. 22, 2004).

[729] Interview with Defense HUMINT official (Nov. 2, 2004); Interview with CIA/DO official (June 23, 2004).

[730] Bureaucratic incentives not only affect the ability to recruit quality sources, but they may

affect the ability to obtain quality reporting from existing sources. When policymaker interest in a particular topic is high and the number of existing sources in that area is low, collectors may understandably respond by pressing an asset to report on issues going beyond his usual access, or by giving more credence to an untried source than would normally be the case. *See, e.g.*, Butler Report at pp. 105-109.

[731] Interview with Defense HUMINT official (Nov. 2, 2004); *see also* SSCI at p. 153.

[732] *See also* SSCI at p. 191 (also concluding that Defense HUMINT's performance represented a "serious lapse" in tradecraft).

[733] Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004). For example, the CIA attempted to validate Curveball's claim that he was present when a BW accident took place by evaluating him for signs of exposure. And when the trailers were discovered in Iraq in the spring of 2003 that were thought to be the mobile facilities reported by Curveball, CIA/DO suggested that Curveball be shown several "control" pictures along with the pictures of the actual trailers found in Iraq as a tool to test his truthfulness. Defense HUMINT and WINPAC analysts believed such "testing" was unnecessary, however, and no such testing appears to have been undertaken. *Id.*

[734] DCI Statement for the Record at Tab 6, p. 7.

[735] *Id.* at p. 2.

[736] Interview with CIA/DO officials (Sept. 22, 2004) (noting that human sources who claimed Iraq did not have WMD were viewed as taking the Iraqi "party line," and thus their information was not considered worthy of dissemination).

[737] Interview with CIA WMD Review Group Analyst (Sept. 23, 2004).

[738] Interview with CIA/DO officials (Sept. 22, 2004).

[739] CIA, *Iraq WMD Lessons Learned* (Aug. 2004) at p. 26.

[740] *Id.*; Interview with Director of the Defense Intelligence Agency Vice Admiral Lowell Jacoby (Jan. 17, 2005).

[741] Interview with NSA officials (Aug. 26, 2004); NSA, *Written Responses from NSA to WMD Commission's NSA Request No. 16* (Feb. 17, 2005) at p. 1.

[742] *See, e.g.*, NGA, *NGA Reassessment of Activity at Al Musayyib Barracks Brigade Headquarters and Ammunition Depot, 1998-2004* (June 15, 2004).

[743] Interview with CIA WINPAC analysts (Aug. 11, 2004). Biological, chemical and, to a lesser extent, nuclear programs, are potentially concealable from overhead reconnaissance, although delivery system programs are more difficult to hide. *Id.*

[744] *Id.*

[745] Even in the case of chemical weapons programs, which are more difficult to conceal than biological warfare programs, imagery alone is not determinative, as demonstrated by the October 2002 NIE's error in analyzing transshipment activity as evidence of an Iraqi CW program.

[746] NIE at p. 28.

[747] Interview with CIA WINPAC CW analyst (Oct. 8, 2004).

[748] NGA, *NGA Reassessment of Activity at Al Musayyib Barracks Brigade Headquarters and Ammunition Depot, 1998-2004* (June 15, 2004).

[749] NGA, *Matrix of NIMA/NGA Intelligence Relative to the BW and CW portions of the NIE*

*on Iraq, October 2002* (June 30, 2004) at p. 13. Even outside of the dual-use context imagery can be misleading. The NIE noted that imagery that had previously been interpreted as motor cases for missiles in fact showed heat treatment ovens used in the production of motor cases. NIE at p. 59.

[750] Collection Concepts Development Center Study, *Iraqi Weapons of Mass Destruction: Recommendations for Improvements in Collection* (Study One) (June 29, 2000) at p. 13.

[751] *Id.*

[752] SSCI at pp. 266-267.

[753] *See generally* Source Documents for the October 2002 NIE.

[754] Interview with Assistant Director of Central Intelligence for Analysis and Production (Sept. 28, 2004) (noting general lack of understanding of, and respect for, MASINT).

[755] Interview with Assistant Director of Central Intelligence for Collection (July 20, 2004) (describing end-to-end review of collection approaches); *see also* SSCI at p. 259.

[756] Collection Concepts Development Center Study, *Iraqi Weapons of Mass Destruction: Recommendations for Improvements in Collection* (Study One) (June 29, 2000) at p. 18.

[757] Interview with NSA officials (Sept. 8, 2004).

[758] NSA, *Memorandum Re: Clarification Question* (Oct. 27, 2004). Somewhat contradictorily, NSA subsequently said that it had in fact "pursued" this recommendation, although it conceded that there was no "active" effort until two years after the CCDC study. NSA, *Written Responses from NSA to WMD Commission's NSA Request No. 16* (Feb. 17, 2005).

[759] Collection Concepts Development Center Study, *Iraqi Weapons of Mass Destruction: Recommendations for Improvements in Collection* (Study One) (June 29, 2000) at p. 10.

[760] Interview with NGA officials (Nov. 16, 2004); SSCI at p. 266 (quoting officials from the National Intelligence Collection Board as to doubling of collection operations).

[761] As noted, beginning in March 2002, NGA increased its coverage to include ammunition depots that had not previously been imaged on a regular basis. Accordingly, there was no "baseline" of activity for these sites on which to base an assessment that the activity level had changed.

[762] Interview with CIA WINPAC CW analyst (Oct. 8, 2004); Interview with NGA officials (Nov. 16, 2004).

[763] Although the Senate Select Committee on Intelligence's report discusses the reliance on imagery intelligence, it does not discuss the effect of the increased coverage on the ability to distinguish increased activity from increased collection.

[764] DCI Statement for the Record at Introduction at p. 2.

[765] Interview with CIA WINPAC nuclear analysts (Aug. 11, 2004).

[766] The tendency to hew to the prevailing analytical view, and to view new information exclusively through the prism of that existing paradigm, is variously described as "self-conditioning," "tunnel vision," "groupthink," "path dependency," etc. Whatever the lexicon, this phenomenon as addressed here describes a tendency to adhere to a prevailing view without sufficiently questioning the hypotheses underlying that conclusion.

[767] To be sure, denial and deception remains a significant challenge to the Intelligence Community. Educating analysts and collectors about that threat is important to ensure that the problem is neither overestimated nor underestimated.

[768] Also, one basis for the conclusion that the tubes were for centrifuges was that the specifications were excessive for rockets, yet CIA analysts did not vigorously pursue an effort to determine the specifications used in the Italian rocket from which the Iraqis had reverse-engineered theirs, reasoning that such information was unnecessary. Similarly, CIA reasoned that the tubes were intended for centrifuges because they were procured through intermediary countries, but that procurement method is equally consistent with the tubes' use in conventional weapons. NIE at p. 74.

[769] A problem with the Team B effort in the mid-1970s was not its existence, which was, in many ways, a salutary instance of outside expertise factoring into Community estimates. Rather, the flaw was that a Team C was not also created to posit that the Soviet Union might actually be *weaker* than either the Intelligence Community or Team B assessed.

[770] Interview with former Secretary of Defense and Director of Central Intelligence James Schlesinger (Aug. 25, 2004) (noting that competition among agencies can improve the product of each agency).

[771] The NIE contained dissenting views from INR, Air Force Intelligence, and DOE on several topics. In that regard, the NIE fully aired conflicting views. One potential subsidiary problem, however, is that whether the dissent appears in the final product (and how it is expressed) depends in part on the willingness and ability of individual agency representatives to present such contrary views forcefully and effectively at NIE coordination meetings. NIE at pp. 7, 14, 16, 52.

[772] *Compare* NIE at p. 14 (INR dissent noting that it saw "no compelling evidence" that Iraq had commenced "an integrated and comprehensive approach to acquire nuclear weapons") *and id*. at p. 16 (DOE agreement that reconstitution is underway but that the tubes are probably not part of that program) *with id*. (NIE assessing that Iraq "has reconstituted its nuclear weapons program").

[773] Interview with NGIC analysts (Dec. 7, 2004); DIA, *Iraq: Procuring Possible Nuclear-Related Gas Centrifuge Equipment* (MID-227-01-SCI) (Nov. 30, 2001) (NGIC assessment that the tube tolerances were excessive for rockets).

[774] SSCI at p. 22 (describing the "layering" phenomenon).

[775] NIE at pp. 28, 52; *see also* DCI Statement for the Record at Tab 2, p. 9.

[776] NIE at p. 28.

[777] *Id.* at p. 33.

[778] SSCI at pp. 22-23 (discussing the layering problem in the CW assessments).

[779] Interview with former CIA WINPAC CW analyst (Nov. 10, 2004).

[780] CIA, former Deputy Director of Central Intelligence Richard Kerr, *The Evidence and Analysis of Iraqi WMD: The National Intelligence Estimate of October 2002* (Jan. 28, 2004) (making the observation that analysts focused too much on weapons and not enough on Iraq).

[781] ISG Report, Regime Strategic Intent at pp. 7-9, 34, 46. The ISG also found that the Iraqi economy and infrastructure were collapsing under the weight of sanctions, making it difficult to restart WMD programs. ISG Report, Nuclear at p. 5. Analysts faced difficulty getting some of this information. Interview with CIA WINPAC analysts (Aug. 11, 2004).

[782] The ability to ensure that weapons analysts will factor in the effect of the social and political context on their analysis depends on meaningful interaction between the functional and regional analytic units. There is some indication that coordination and cooperation between

these units needs improvement. As one analyst noted, the functional units such as WINPAC have highly varying relations with the regional components, such as NESA. Interview with CIA WINPAC analysts (Aug. 11, 2004).

[783] Indeed, one analyst related that the demand for current intelligence became so acute that he not only gave up long-term research, but often was spending so much time preparing current intelligence and responding to policymaker follow-up questions on that current intelligence that he could not even read his daily in-box of raw intelligence reporting. That task was delegated to a junior analyst (with no expertise on Iraq WMD issues) who pulled traffic he thought might be of interest. Interview with former CIA WINPAC CW analysts (Nov. 10, 2004).

[784] NIE at p. 13.

[785] *See, e.g.*, Interviews with CIA WINPAC analysts (Aug. 11, 2004 and Oct. 8, 2004); Interview with DOE intelligence analyst (Oct. 27, 2004) (noting that "DOE didn't want to come out before the war and say [Iraq] wasn't reconstituting").

[786] CIA, *Iraq and al-Qa'ida: Interpreting a Murky Relationship* (CTC 2002-40078 CH) (June 21, 2002) at p. 5 (the scope note to the paper stated that "our approach is purposefully aggressive in seeking to draw connections, on the assumption that any indication of a relationship between these two hostile elements would carry great danger to the U.S."); *see also* SSCI at p. 304.

[787] Interview with NSA officials (July 14, 2004).

[788] Classified intelligence report (March 2002).

[789] CIA, Memorandum for the Deputy Executive Director, CIA, *DI-DO Information Sharing Status* (Sept. 28, 2004) at p. 5. CIA is coordinating this effort with Defense HUMINT. CIA, *Changes to Strengthen DO Intelligence* (Nov. 8, 2004) at p. 5.

[790] This is a problem that applies to analyst-to-analyst relationships as well. For example, CIA analysts did not share their increasing doubts about the significance of the Iraqi mapping software procurement with other analysts in the Community.

[791] CIA, *DO/EA Division Review on DI-DO Information Sharing Pilot* (Aug. 9, 2004).

[792] Interview with former Deputy Director for Operations James Pavitt (May 18, 2004); Interview with Division Chief and Group Chief, CIA/DO (Dec. 14, 2004).

[793] SSCI at p. 247.

[794] Interview with National Intelligence Officer for Intelligence Assurance (Nov. 18, 2004).

[795] SSCI at pp. 269-271.

[796] Interview with CIA/DO officials and CIA Iraq WMD Review Group analyst (Aug. 3, 2004).

[797] Interview with Assistant Director of Central Intelligence for Analysis and Production (Sept. 22, 2004).

[798] *Id.* (noting that the average NIE is 55 pages, while the average estimate of one close liaison intelligence service equivalent is about 17 pages).

[799] *Id.*

[800] *Id.* (noting that the specified liaison service presents the views of each agency where there is a difference in opinion).

[801] Interview with NIO/SNP (Sept. 20, 2004); *see also* NIC, *Everything You Always Wanted to Know About NIEs…But Were Afraid to Ask* (2004) (unclassified booklet).

[802] NIC, *National Intelligence Council* (April 2004) (unclassified booklet describing the roles and responsibilities of the NIC).

[803] *Id.*

[804] Interview with NIO/SNP (Sept. 20, 2004) (normally takes "months" to publish an NIE). Some NIEs have been produced very quickly, however. *See* CIA, Center for Studies in Intelligence, *Sherman Kent and the Board of National Estimates: Collected Essays* (1994) (noting that NIE entitled "Sino-Soviet Intentions in the Suez Crisis" was published in one day).

[805] NIC, *Everything You Always Wanted to Know About NIEs…But Were Afraid to Ask* (2004) (unclassified booklet). The Terms of Reference are reviewed by peers in the NIC and presented to the Community, and often to the NFIB, for approval. *Id.*

[806] *Id.; see also* SSCI at p. 10 (describing NIE process).

[807] Interview with NIO/SNP (Sept. 20, 2004); *see also* SSCI at p. 11.

[808] *Id.* The draft is also sometimes submitted to a panel of experts for review. *Id.*; SSCI at p. 11.

[809] Interview with NIO/SNP (Sept. 20, 2004); *see also* SSCI at p. 11.

[810] Interview with NIO/NESA (Nov. 8, 2004).

[811] Interview with NIO/SNP (Sept. 20, 2004).

[812] *Id.* (noting that the Senate demanded the NIE be completed in three weeks); *Letter from Senator Richard Durbin to Director of Central Intelligence George Tenet* (Sept. 9, 2002) (requesting that the DCI "direct the immediate production of a National Intelligence Estimate assessing the current and projected status—over the next 10 years—of Iraq's weapons of mass destruction capabilities"). Senators Bob Graham and Carl Levin also requested an NIE covering various topics related to Iraq's WMD programs. CIA, *Congressional Requests and Responses re Iraq WMD Chronology.*

[813] Interview with NIOs (May 26, 2004) (describing the October 2002 Iraq NIE process).

[814] Interview with DOE intelligence analyst (Oct. 27, 2004).

[815] *Id.*

[816] During this time period, however, the CIA Directorate of Operation's Counterproliferation Division provided the SSCI staff with quarterly briefings on its WMD covert action operations, including those directed against Iraq, according to the Chief of Intelligence for the Directorate of Operations. Comments from Chief of Intelligence, Office of the Deputy Director of Operations (March 3, 2005).

[817] Interview with NIO/SNP (Sept. 20, 2004).

[818] *Id.*

[819] *Id.*; *see also* SSCI at p. 286.

[820] Interview with NGIC officials (Dec. 7, 2004); Interview with NGIC official (Dec. 14, 2004).

[821] *Id.* (including NGIC CW analysts) (Dec. 7, 2004). A review of NGIC's published intelligence shows that as late as October 2001, NGIC estimated that Iraq had between 10-100 tons of agents in its stockpile. NGIC, *Iraq: Current Chemical Warfare Capabilities* (Oct. 23, 2001). In March 2003, NGIC published an assessment of Iraq's CW delivery capabilities that noted that the "upper limit of the assessed Iraqi CW agent stockpile [was] 500 metric tons." NGIC, *Iraq's UAV CW Delivery Capabilities—An Unlikely Threat* (NGIC-1671-7685-03) (March 25, 2003).

[823] Interview with NGIC officials (Dec. 7, 2004); Interview with NGIC official (Dec. 14, 2004).

[824] *Id.*

[825] Electronic mail from NGIC to CIA and DIA, containing NGIC's line in and line out edits on the CW section of the draft NIE (Sept. 24, 2002) (noting "[w]e are not able to come up tomorrow [to the NIE coordination meeting] so please support our points").

[826] Interview with NIO/SNP (Jan. 5, 2005); *see also* Interview with NGIC officials (Dec. 7, 2004). The NIO/SNP noted that the NIE included at least 15 pages of alternative views from different agencies, suggesting that there was not an effort afoot to quash dissent. NGIC admits that it did not convey its position to the Army G-2 representative prior to the Military Intelligence Board. Comments from NGIC (March 3, 2005).

[827] SSCI at p. 206 (quoting DIA testimony). NGIC has now retreated somewhat from its allegations, claiming that it has "reexamined this issue" and NGIC now "cannot confirm" whether the DIA representatives conveyed NGIC's position to the NIO during the coordination meeting for the NIE. NGIC asserts that DIA's concurrence with the stockpile position eventually published in the NIE indicates that DIA did not present NGIC's stockpile position at the coordination meeting. According to NGIC, DIA also did not inform them about subsequent drafts of the NIE. Comments from NGIC (March 3, 2005). In any event, NGIC also noted that DIA—and not NGIC—had the responsibility within the defense intelligence establishment to assess CW stockpiles. *Id.*

[828] Interview with NGIC officials (Dec. 7, 2004). The NGIC analyst noted that NGIC had subsequently published items that were "not in concert" with the NIE, but had not published anything to clarify its position on the 100-500 MT stockpile range. *Id.* In addition to the Military Intelligence Board, two more opportunities were available for NGIC to have provided its views. An errata sheet was published for the NIE on October 18, 2002, about three weeks after the NIE was published. NGIC notes that it "has no record of being informed" of the errata sheet. Comments from NGIC (March 3, 2005). If NGIC believed its views were mistakenly (or purposefully) omitted, it could have tried to clarify the record through this errata sheet. Also, another NIE was published in November 2002, as a follow-up to the October NIE to cover certain aspects of the tactical CW threat that the military wanted to have addressed. NIC, *Iraq's Chemical Warfare Capabilities: Potential for Dusty and Fourth-Generation Agents: Memorandum to Holders of NIE 2002-16HC* [the October 2002 NIE] (M/H NIE 2002-16) (Nov. 2002). NGIC took issue with some aspects of this NIE, but remained silent on the issue of restarted production for increased stockpiles. *Id.*

[829] *See, e.g.*, Senator Carl Levin, "Buildup to War on Iraq," *Congressional Record* (July 15, 2003) at pp. S9358-S9360; Walter Pincus and Dana Priest, "Some Iraq Analysts Felt Pressure from Cheney Visits," *Washington Post* (June 5, 2003) at p. A1; Nicholas D. Kristof, "White House in Denial," *New York Times* (June 13, 2003) at p. A33; Jay Taylor, "When Intelligence Reports Become Political Tools…" *Washington Post* (June 29, 2003) at p. B2; Douglas Jehl, "After the War: Weapons Intelligence; Iraq Arms Critic Reacts to Report on Wife," *New York Times* (Aug. 8, 2003) at p. A8; Dana Milbank and Walter Pincus, "As Rationales for War Erode, Issue of Blame Looms Large," *Washington Post* (July 10, 2004) at p. A1; Glenn Kessler, "Analyst Questioned Sources' Reliability; Warning Came Before Powell Report to UN," *Washington Post* (July 10, 2004) at p. A9; T. Christian Miller and Maura Reynolds, "Question of Pressure Splits Panel," *Los Angeles Times* (July 10, 2004) at p. A1; James Risen and Douglas Jehl,

"Expert Said to Tell Legislators He Was Pressed to Distort Some Evidence," *New York Times* (June 25, 2003) at p. A11; Robert Schlesinger, "Bush Aides Discredit Analysts' Doubts on Trailers," *The Boston Globe* (June 27, 2003) at p. A25; Seymour M. Hersh, "The Stovepipe," *The New Yorker* (Oct. 27, 2003) at p. 77.

[830] Our review has been limited by our charter to the question of alleged policymaker pressure on the Intelligence Community to shape its conclusions to conform to the policy preferences of the Administration. There is a separate issue of how policymakers used the intelligence they were given and how they reflected it in their presentations to Congress and the public. That issue is not within our charter and we therefore did not consider it nor do we express a view on it.

[831] Interview with CIA Ombudsman for Politicization (Oct. 4, 2004) (describing CIA definition of "politicization," the core of which is alteration of analytical judgments under pressure to reach a particular conclusion).

[832] Interviews with CIA WINPAC analysts (Aug. 11, 2004; Sept. 20, 2004; and Oct. 8, 2004).

[833] Interview with former Assistant Secretary of State for Intelligence and Research (Nov. 1, 2004).

[834] The CIA Ombudsman for Politicization also conducted a formal inquiry in June 2002 regarding a CIA assessment of possible Iraqi links to al-Qa'ida. This inquiry, which was discussed in the SSCI report, did not involve Iraqi WMD assessments. Rather, that inquiry focused on a paper published by the Counterterrorist Center Office of Terrorism Analysis (CTC/OTA) entitled *Iraq and al-Qa'ida: Interpreting a Murky Relationship* (CTC 2002-40078 CH) (June 21, 2002). CIA regional analysts from the Office of Near East and South Asia analysis (NESA) were upset about the paper for several reasons: because the paper went further than NESA was prepared to go with respect to possible links between al-Qa'ida and Iraq, because the paper was not coordinated with NESA, and because the consumer was not informed that the paper represented an uncoordinated assessment representing only the views of CTC/OTA. The CIA Ombudsman's investigation, based on interviews with numerous analysts involved, revealed that the root of the problem was a strained relationship between the two offices rather than any attempts at "politicization." He found no evidence that political pressure had caused any analyst to change any judgments. The Ombudsman concluded that the problem was instead a management issue. Interview with CIA Ombudsman for Politicization (Oct. 4, 2004).

[835] *Id.* (providing Charter for Ombudsman's office). That office defines politicization as "an unprofessional intrusion by intelligence officers into the policymaking process, characterized by skewing of information and judgments to support or oppose a specific policy or general political ideology." Such "unprofessional manipulation of information and judgments can be deliberate—for example, to please a policymaker or under pressure from an intelligence manager. The distortion can also be unintentional, arising from poor tradecraft practice." *Id.*

[836] *Id.*

[837] *Id.*

[838] Interview with CIA WINPAC analysts (Oct. 8, 2004).

[839] Interview with National Intelligence Officers responsible for drafting NIE (May 26, 2004). A number of analysts have pointed to the limited time allotted to complete the NIE as a species of pressure on analysts. When pressed by Commissioners and staff members as to

whether more time would have changed the NIE's assessments, however, the NIOs have answered that the Estimate would not have come to different conclusions even if more time had been available. Interview with National Intelligence Officers responsible for drafting NIE (May 26, 2004); Interview with NIO/SNP (Sept. 20, 2004).

[840] Interview with CIA WINPAC analysts (Oct. 8, 2004) (citing aluminum tubes for nuclear weapons, Curveball's reporting for biological weapons, and "transshipment activity" for CW); *see also* DCI Statement for the Record at Tab 1, p. 19; Tab 3, p. 16; and Tab 2, p. 3.

[841] Interview with CIA/DO officials and CIA Iraq WMD Review Group (Aug. 3, 2004); Interview with CIA WINPAC analysts (Oct. 8, 2004); Interview with NIO/NESA (Nov. 8, 2004). For example, the DCI Statement for the Record, which explained how analysts reached their conclusions in the NIE, noted that analysts would have required substantial new streams of information indicating that Iraq had abandoned its WMD programs to come to the conclusion that Iraq had no WMD programs or stockpiles. DCI Statement for the Record at Tab 1, pp. 34-35; Tab 2, p. 14; Tab 3, pp. 26-29; and Tab 4, p. 11.

[842] Interview with NIO/NESA (Nov. 8, 2004).

[843] *Id.*

[844] *Id.*

[845] Interview with DOE intelligence analyst (Oct. 27, 2004).

[846] Interview with former Assistant Secretary of State for Intelligence and Research (Nov. 1, 2004). The head of the Intelligence Community must constantly make judgments based on ambiguous information, and based on that information make decisions about how to strike the balance between independence and access when presenting estimates to policymakers. *For a discussion of this issue, see* Jack Davis, "The Challenge of Managing Uncertainty: Paul Wolfowitz on Intelligence-Policy-Relations," *Studies in Intelligence*, no. 5 (1996); Efraim Halevy, "In Defence of the Intelligence Services," *The Economist* (July 31, 2004) at pp. 21-23.

[847] Interview with former Assistant Secretary of State for Intelligence and Research (Nov. 1, 2004); Interview with NIO/NESA (Nov. 8, 2004). *For variations on this theme, see* Thomas L. Ahern, Jr., CIA Center for the Study of Intelligence, *Good Questions, Wrong Answers: CIA's Estimates of Arms Traffic Through Sihanoukville, Cambodia, During the Vietnam War* (Feb. 2004); Harold P. Ford, CIA Center for the Study of Intelligence, *CIA and the Vietnam Policymakers: Three Episodes 1962-1968* (1998). In one instance, Mr. Ford concluded: "In our third episode, 1967-68, a few working-level CIA officers developed and championed accurate assessments … Many hazards, however, undercut these judgments. Political pressure from the White House [and other influential military and civilian parties] caused DCI Helms…to override the conclusions their analysts had derived from available evidence. Then Headquarters analysts themselves refused to accept new field estimates of the enemy's intentions for Tet because these did not jibe with their own published estimation of the enemy's likely conduct." *CIA and the Vietnam Policymakers* at p. 2.

[848] Interview with former CIA WINPAC analysts (Nov. 10, 2004).

[849] CIA, Inspector General, *Inspection Report of the DCI Center for Weapons Intelligence, Nonproliferation, and Arms Control (WINPAC) Directorate of Intelligence* (IG 2004-0003-IN) (Nov. 2004) (Employee Opinion Survey) at p. 9. The same survey revealed that 7 percent of WINPAC analysts had "personally experienced or observed an instance within WINPAC where [sic] an analytic judgment was changed to suit a customer's preference." *Id.*

[850] *Id*.

[851] Interview with former CIA WINPAC analysts (Nov. 10, 2004).

[852] Interview with former CIA WINPAC BW analyst (Nov. 10, 2004).

[853] *Id*.

[854] CIA, Inspector General, *Inspection Report of the DCI Center for Weapons Intelligence, Nonproliferation, and Arms Control (WINPAC) Directorate of Intelligence* (IG 2004-0003-IN) (Nov. 2004) at pp. 13-14.

[855] *Id*.

[856] *Id*.

[857] Interview with former CIA WINPAC analysts (Nov. 10, 2004).

[858] The analyst had also brought his concerns to the CIA Ombudsman for Politicization in November 2003. That inquiry focused only on whether analysts had been pressured to change their analysis, and the Ombudsman concluded there had been no such impropriety. The Ombudsman referred the matter to the DDI, who met with WINPAC analysts and explained why a reassessment was not needed. Interview with CIA Ombudsman for Politicization (Oct. 4, 2004).

[859] Interview with former CIA WINPAC analysts (Nov. 10, 2004).

[860] In another incident, a CIA/DO case officer has filed suit against the CIA, alleging that CIA officials pressured him to produce intelligence reports to support the position that Iraq had WMD, and that the CIA retaliated against him when he refused. Dana Priest, "Officer Alleges CIA Retaliation," *Washington Post* (Dec. 9, 2004) at p. A2.

[861] *See supra* Nuclear Weapons Finding 1.

[862] *See supra* Biological Warfare Findings 1 and 6.

[863] *See supra* Conclusion 28.

# CHAPTER TWO
# CASE STUDY: LIBYA

## Summary & Findings

In accordance with our mandate, we compared the Intelligence Community's judgments concerning Libya's weapons programs before Tripoli's decision to open them to international scrutiny with current assessments, thereby providing a rare "before" and "after" study of the U.S. Intelligence Community's performance. We believe that the collection and analytic efforts on Libya's weapons represent, for the most part, an Intelligence Community success story. The Community collected good intelligence on Libya's nuclear and missile programs, and it used this intelligence to enter into well-managed discussions with the Libyans, which eventually led to on-site inspections, and, ultimately, Libyan disavowal of weapons of mass destruction. We found that:

- The Intelligence Community accurately assessed what nuclear equipment Libya possessed, but it was less successful in judging how Libya could exploit the material;
- The Intelligence Community's judgment that Libya possessed chemical weapons agents and chemical weapons bombs was correct, but Libya's actual chemical weapons stockpile proved to be smaller than estimated;
- The Intelligence Community's assessments of Libya's missile programs appear to have been generally accurate, but it is not yet possible to evaluate them fully because of limited Libyan disclosures;
- The Intelligence Community's penetration of the A.Q. Khan proliferation network provided invaluable intelligence on Libya's nuclear efforts;
- The contribution of technical intelligence to assessments of Libya's chemical, biological, and nuclear programs was limited; it provided some valuable information on Libya's missile programs;
- Analysts generally showed a commendable willingness to question and reconsider their assessments in light of new information;
- Analysts tracking proliferation program developments sometimes inappropriately equated procurement activity with technical capabilities; and
- Shifting priorities and the dominance of current intelligence production leave little time for considering important unanswered questions on Libya.

## INTRODUCTION

On December 19, 2003, the Libyan government announced that it would halt all efforts to produce or acquire chemical or nuclear weapons, and pledged to eliminate any existing stockpiles of such weapons or materials.[1] To ensure compliance, Libya agreed to formally "declare" the existence of all relevant weapons, materials, and facilities, and to permit a series of inspections in Libya, commencing in January 2004. As a result of these declarations and visits, inspectors were able to speedily remove key materials related to missiles and weapons of mass destruction (WMD)—including centrifuges, an entire uranium conversion facility, nuclear weapons designs, uranium hexafluoride, and guidance packages for the Scud-C missile—and ensconce them safely in the United States. By March 2004, inspectors confirmed that Libya had destroyed its unfilled chemical munitions and secured its chemical weapons stockpile of approximately 24 metric tons of mustard gas for eventual destruction.[2] This unprecedented disarmament effort resulted in significant steps toward the normalization of U.S.-Libyan relations, including the lifting of most economic sanctions on Libya and the unfreezing of its assets in the United States.[3]

As directed by the Executive Order establishing this Commission, we have compared the Intelligence Community's judgments concerning Libya's weapons programs before Tripoli's decision to open them to international scrutiny with current assessments, thereby providing a rare "before" and "after" study of U.S. intelligence assessments. In so doing, we interviewed policy officials as well as intelligence analysts and collectors. We also consulted finished intelligence production, the written "collection requirements" sent to intelligence agencies, and other intelligence documents.

We conclude that collection and analytic efforts with regard to Libya's weapons programs and in support of the U.S./U.K.-led efforts represent, for the most part, an Intelligence Community success story. The Community collected significant intelligence on Libya's nuclear and missile programs, providing a vital lever used by policymakers to pressure Tripoli to openly declare its nuclear and chemical materials and disavow its WMD and long-range missile programs.

Some discrepancies did exist between analysts' judgments prior to 2003 and the realities found in Libya; for example, analysts overestimated certain capabilities

and developmental timelines relating to Libya's nuclear program and underestimated some elements of Libya's missile program. And no evidence of an expected small-scale Libyan biological weapons program has been uncovered. However, the Community's key pre-December 2003 intelligence and assessments as to Libyan nuclear procurement and chemical production appear to have been largely confirmed by the facts on the ground.

While the discrepancies that were found did not affect the general accuracy of the judgments that Libya was actively pursuing development of a nuclear weapon and possessed chemical weapons, they do point to some weaknesses in collection and analysis. It is apparent to us that the Community is not well-postured to replicate such successes.

## COMPARING INTELLIGENCE ASSESSMENTS WITH U.S. FINDINGS IN LIBYA

### Nuclear Weapons

**Finding 1**

The Intelligence Community accurately assessed what nuclear-related equipment and material had been obtained by Libya, but it was less successful in judging how well Libya was able to exploit what it possessed.

Prior to December 2003, the strength of clandestine reporting on Libya's procurement activity provided the Intelligence Community with a fairly accurate view of what nuclear-related equipment and material Libya possessed. Intelligence suggesting that Libya was receiving nuclear equipment via the A.Q. Khan network, and reporting from the 1980s indicating that Libya had acquired yellowcake from Niger in 1978 were later validated by inspections.[4] Intelligence that Libya had received uranium hexafluoride feed material for its gas centrifuge program was also confirmed.[5] In addition, it appears that the Community correctly identified key personnel in the nuclear program.[6] Libya's declarations did reveal some surprises that are discussed in the classified report.[7]

The Community was less successful in judging how well Libya was able to exploit what it possessed. CIA and DIA had assessed that Libya could pro-

duce enough weapons grade uranium for a nuclear warhead as early as 2007.[8] However, as noted in a 2004 National Intelligence Estimate, the 2007 date was shown by the declarations and inspections to be unrealistic, and this assessment did not take into account the developmental difficulties the Libyans actually faced.[9] Indeed, the lack of sufficient progress on developing a nuclear weapon is one of the factors that may have prompted Qadafi to abandon and disclose Libya's nuclear program.

## Chemical Weapons

### Finding 2

The Intelligence Community's central judgment that Libya possessed chemical weapons agents and chemical weapons aerial bombs was correct, but Libya's actual chemical agent stockpile proved to be smaller in quantity than the Intelligence Community estimated.

Analysts based their estimates of Libya's chemical weapons capabilities on assessments of chemical production capabilities and access to precursors. Analysts judged that Libya had produced, at most, roughly 100 metric tons of mustard agent.[10] They also believed that Libya had produced small quantities of sarin,[11] but assessed that this would have been of very low quality and therefore would have degraded quickly.[12] Analysts generally did not believe that Libya had chemical warheads for missile delivery, but they assessed that Libya could probably weaponize existing chemical agents in some fashion.[13] They further concluded that Libya had produced approximately 1,000 250-kg aerial chemical weapons bombs.[14]

Prior to December 2003, the Intelligence Community continued to judge that Libya was pursuing a limited chemical weapons program through small-scale research efforts.[15] The CIA also assessed that Libya wanted to start development of new nerve agents.[16] Moreover, CIA analysts noted that "several hundred" Iraqi chemical and biological weapons experts had been in Libya during the decade preceding the disclosures.[17]

Although a 2004 National Intelligence Estimate correctly stated that Libya possessed chemical weapons agents and aerial bombs, Libya's actual chemical stockpile proved to be smaller in quantity than the Intelligence Community estimated. Libya declared in March 2004 to the Organization for the

Prohibition of Chemical Weapons (OPCW) that it possessed about 24 metric tons of sulfur mustard agent—considerably less than the Intelligence Community had predicted. On the other hand, Libya declared to OPCW that it had produced more than 3,500 unfilled aerial munitions, including 250-kg bombs.[18]

## Biological Weapons

### Finding 3

The Intelligence Community's assessment that Libya maintained the desire for an offensive biological weapons program, and was pursuing at least a small-scale research and development effort, remains unconfirmed.

In the early 1990s, analysts had strong evidence that Libya was developing a biological weapons program, and policymakers worked closely with the international community to thwart Libya's efforts in this area—including instituting sanctions that prohibited the purchase of even dual-use items.[19] Throughout that period, analysts judged that Libya maintained the desire for an offensive biological weapons program, and most assessed that Libya was pursuing at least a small-scale research and development effort.[20]

These assumptions persisted through the late 1990s and the early part of this decade. During this period, analysts observed signs of reorganization and revitalization of the program, including purchases of dual-use equipment. This pre-declaration intelligence remains unconfirmed.[21]

Libyan declarations have failed to shed light on Tripoli's plans and intentions for its biological program. In addition, the suspect facilities inspectors have visited all have legitimate civilian biotechnology uses.[22] One Libyan official stated that while Libya intended to build an offensive biological weapons program, it never went beyond the planning stage, and that Qadafi considered the biological program too dangerous and ordered its termination sometime prior to 1993.[23] A senior Libyan official, who has remained a key interlocutor on Libya's WMD programs, initially referred inspectors to another senior official who ostensibly knew the details of the biological warfare (BW) program.[24] According to intelligence, this senior official also "would not discuss any intent, offensive or defensive, for the Libyan BW program."[25] Lower-level officials have not only denied working on an offensive program, but some

have also denied that Libya had even a defensive program. This group of lower-level officials, comprising the bulk of biological weapons officials with whom the inspectors have met, claims to have stopped working in the program in the early 1990s.[26] None of them admit to knowing about the possible revitalization of the program early this decade.

As a result, it is not possible to measure with certainty the accuracy of the Intelligence Community's assessments of Libya's biological weapons program, and we cannot address further reasons why uncertainty continues in this unclassified report.

## Delivery Systems

### Finding 4

The Intelligence Community's assessments of Libya's missile programs appear to have been generally accurate, but it is not yet possible to evaluate them fully because of limited Libyan disclosures.

Declarations and inspections appear to confirm analysts' skepticism about Libya's indigenous missile program. Libyan declarations confirm that the Intelligence Community had a comprehensive understanding of Libya's programs, its designs, and its success rate.[27] The Intelligence Community's predictive record on Libya's cooperative efforts with foreign nations is more mixed, but the Intelligence Community's forecasts were nevertheless generally accurate. The Community—despite possibly erring in assessing the scale and developmental timeline—correctly identified ongoing efforts to extend the range of Libya's Scud missiles.[28]

It is not yet possible to fully evaluate the accuracy of the Intelligence Community's pre-disclosure assessments. However, what we know at this point suggests that the Community's predictions about Libya's missile programs were generally accurate.

## THE UNDERPINNINGS OF SUCCESS

This section examines the contribution of the collection and analytical disciplines to achieving the success described above. While it appears the Community was able to achieve more with regard to Libya's nuclear and missile programs than its chemical and biological programs, the Community's overall record illustrates multiple examples of ways in which intelligence can succeed. These include: seamless partnerships between analysts and collectors; the availability of a variety of reporting from human and technical collectors; and the ability of analysts to be flexible in their judgments while tracking and monitoring programs over time. These kinds of successes may be among the best the current intelligence system can offer.

### Nuclear Program

**Finding 5**

The Intelligence Community's penetration of the A.Q. Khan proliferation network provided invaluable intelligence on Libya's nuclear efforts.

Intelligence Community analysts agree that the information obtained as a result of penetrating the Khan network was critical to their understanding Libya's nuclear efforts.

The Khan network provided "one-stop shopping" for a state seeking to develop a gas centrifuge uranium enrichment program, to procure nuclear weapons information, or to gain access to supplier contacts.[29] By 2000, information was uncovered that revealed shipments of centrifuge technology from the Khan network were destined for Libya.[30] The Intelligence Community then learned through what former DCI George Tenet correctly described as "operational daring"[31] that the Khan network was the source of Libya's procurement of a nuclear weapons design.[32] Further information about the details of these efforts is classified and cannot be discussed in an unclassified setting.

The Intelligence Community's dramatic successes with regard to Libya are further exemplified by events surrounding the seizure of the BBC China, a ship bound for Libya carrying centrifuge technology.[33] The Intelligence Com-

munity's detection of the vessel and its cargo was based on a variety of innovative collection efforts which also cannot be discussed in detail here. Nevertheless, it is apparent that the outcome of these operations—which facilitated interdiction of materials providing definitive proof that Libya was working on a clandestine uranium enrichment program—served as a critical factor in Tripoli's decision to open up its weapons programs to international scrutiny.[34]

## Chemical and Biological Warfare Programs

### Finding 6

The Intelligence Community's performance with regard to Libya's chemical and biological programs was more modest, due in part to the limited effectiveness of technical collection techniques against these targets.

As discussed above, the Intelligence Community possessed some limited information suggesting that Libya was continuing work on limited chemical and biological programs. The overall paucity of intelligence on these programs, however, may be attributed in no small measure to the general ineffectiveness of technical collection efforts.

That being said, it should be noted that there are few distinguishing characteristics that enable the identification of chemical or biological facilities through imagery or other technical means. Moreover, much of the technology and expertise required for chemical and biological programs is dual-use, making it easier to acquire and more difficult for the Community to track. It is also apparent that, at least with regard to biological weapons, the relatively low volume of information could be attributed to the fact that Libya may not have actually had an active biological warfare program.

## Delivery Systems

### Finding 7

The Intelligence Community gathered valuable information on Libya's missile programs.

In contrast to the chemical and biological programs, the Community was well-postured to support the efforts of policymakers with regard to Libya's missiles. The Community had intelligence on facility locations, personnel involved in the programs, and Libya's cooperative efforts with other nations. This broad understanding contributed significantly to the success of the U.S./U.K. inspections.

## Analysis

### Finding 8

Analysts generally demonstrated a commendable willingness to question and reconsider their assessments in light of new information.

Prior to 1999, analysts were skeptical about Libya's ability to implement functioning WMD programs. While a great deal of attention was focused on Libya's chemical weapons development efforts, analysts generally viewed Libya as an inept bungler, the court jester among the band of nations seeking biological or nuclear capabilities. This skepticism was based on Libya's lack of a high-technology industrial base, the absence of a trained cadre of sophisticated scientists, and the success of international sanctions, which hampered Libya's efforts to purchase complete or partially complete WMD systems.[35]

When new information began to emerge in 1999 and 2000 suggesting that Libya was reinvigorating its nuclear, missile, and biological programs, analysts immediately began to re-examine their past assumptions and launched formal efforts to explore alternative scenarios. For example, in 2001 and 2002, CIA analysts organized simulation workshops to examine the implications of suspected changes in Libya's nuclear and missile programs.[36] These efforts, however, received only limited management support, and analysts told

us that the focus on current production meant that they had little time and few resources for this analytic endeavor.[37]

The new information led technical analysts to change their views dramatically about the Libyans' abilities to integrate technologies into weapons. Analysts shifted to what amounted to a "worst case" analysis, judging in a 2001 National Intelligence Estimate that Qadafi could have a nuclear weapon as early as 2007 (down from 2015 in an Estimate two years earlier), given foreign assistance.[38] The intelligence that led to this change was from classified intelligence reporting that cannot be discussed in this unclassified report. [39]

Meanwhile, in the months leading up to this new information, the Community's political analysts observed that, given Qadafi's efforts to normalize relations with the West, renunciation of Libya's WMD programs would be a natural next step.[40] However, because good evidence showed that Tripoli was still acquiring components for weapons programs, analysts believed that they could not conclusively assess that Qadafi would open the programs for inspection. Nonetheless, analysts wanted to alert policymakers to what they saw as a likely and exploitable possibility. Analysts subsequently asked the DCI's red cell team—an office responsible for testing alternative hypotheses—to consider the theory, and the team published a paper considering this scenario.[41]

**Finding 9**

Analysts tracking proliferation program developments sometimes inappropriately equated procurement activity with technical capabilities, and many analysts did not receive the necessary training to avoid such failings.

The analysts who tracked Libya's proliferation program saw intelligence on Libyan attempts to procure chemical, biological, and nuclear components and technologies, but lacked detailed information on Libya's ability to produce workable weapons systems from these acquired items. Unfortunately, analysts often equated procurement activity with weapons system capability.[42] As our Iraq case study previously noted, this equation of procurement with capability is a fundamental analytical error—simply because a state can buy the parts does not mean it can put them together and make them work. In our judgment, based upon our discussions with senior analytic experts, this error was caused

by multiple factors, including a lack of experience or training among technical analysts in how to incorporate the systems integration capabilities of a would-be nuclear power into their assessments. In addition, many technical analysts have a weak understanding of the scientific, academic, industrial, and economic base a country requires in order to develop and actually produce weapons.

In the case of Libya (and Iraq, as we described earlier), the propensity to equate procurement with capability was partially the result of collectors gathering a disproportionately large volume of procurement-related intelligence, which may have, in turn, led analysts to overemphasize its importance. To avoid such traps, we believe that analysts—who all too often are rewarded based upon the production of current intelligence reporting—need stronger incentives to invest the substantial time necessary to develop expertise in foreign research, development, and acquisition capabilities.

### Finding 10

Analytic products sometimes provided limited effective warning to intelligence consumers, and tended to separate WMD issues from broader discussions of political and economic forces.

Finally, we note that some of the analysis produced prior to Libya's renunciation of WMD provided intelligence consumers with limited useful warning. For example, National Intelligence Estimates on Libya's nuclear program only included assessments of when Libya "could" complete a nuclear warhead, without a corresponding judgment about when such an event was likely or the probability of such an event. Equally problematic, the use of WMD-specific Estimates isolated analysis of the WMD question from discussions of the political and economic forces that could lead to significant advances or delays in a national WMD program. One of the Libya Estimates even noted this explicitly, stating that its estimates were based on the success and pace of the missile programs, international technology transfers, political motives, military incentives, and economic resources, and did not take into account the possibility of significant political and economic change.[43] This weakness is similar to that found in our Iraq case study, which found that the Intelligence Community failed to examine seriously the possibility that domestic or regional political pressures (or some other factors) might have prompted Sad-

dam Hussein to destroy his stockpiles and to forswear active development of WMD after the first Gulf War.[44]

## LOOKING AHEAD

The Intelligence Community's efforts are currently focused on supporting U.S. government efforts to assess Libyan compliance with the terms of its agreements to dismantle its chemical, biological, nuclear, and missile programs. With the establishment of an official presence in Tripoli, the United States has had, since January 2004, a standing presence in-country that will provide continuous assessment of Libya's compliance with its dismantlement commitments.[45] In addition, the United States, the United Kingdom, and Libya have established a standing trilateral mechanism called the Steering and Coordinating Committee to address future weapons-related issues.[46] As a result, many in the policy and intelligence communities believe there is an "extremely low probability of things going wrong" with regard to the Libyan agreements.[47]

These positive developments aside, the Intelligence Community bears a significant and ongoing burden relating to Libya. The Community must continue to assist in verifying Libyan disclosures.

Moreover, it is clear that Libya has been considerably less forthcoming about the details of its chemical and biological weapons efforts than about its nuclear and missile programs. The analysts we interviewed agreed that if Libya maintained any biological or chemical programs, they would be small-scale.[48] And whatever may be said about the current state of the Libyan programs and the veracity of Tripoli's disclosures, it remains true that the mercurial regime may suddenly shift its plans and intentions, leading to a covert resuscitation of these programs that the Intelligence Community will be expected to detect.

There are, moreover, other significant ongoing intelligence challenges concerning the Libya target. For instance, the policy community will look to the Intelligence Community to answer questions surrounding Libyan compliance with its pledge to renounce and cease the use of terrorism.[49] For the reasons discussed below, we have some doubts about whether the Intelligence Community is well postured to confront these challenges.

### Reduced Emphasis on the Target

**Finding 11**

Shifting priorities and the dominance of current intelligence production leave little time for considering important unanswered questions on Libya, or for working small problems that might prove to have an impact on reducing surprise over the long term.

There is growing concern within the Intelligence Community that thinking "Libya is done" may leave collectors and analysts without the resources needed to track and monitor future change.[50] Competing priorities have reduced the focus on Libya since the 2003 declarations, and Libya may again become a low priority for collectors. Some analysts say they have already begun to feel the effects of the shift in priorities.[51]

There is little doubt that important questions remain about Libya's WMD programs. Yet given competing demands on technical analysts (tracking Libyan missile developments, for example, is only a part of the responsibilities of a single analyst at CIA), it is difficult to see how the Community will work these issues as policy priorities fluctuate.

**Finding 12**

This finding is classified.

## CONCLUSION

The Intelligence Community should be commended for its contributions to forcing Tripoli to openly declare its nuclear and chemical materials and abandon development efforts, as well as hand over parts of its missile force and cancel its long-range missile projects. Such renunciation is, we believe, the real measure of a WMD-related intelligence success. At the same time, the Intelligence Community should recognize the ways in which it can improve its collection and analysis efforts, and how the shift of resources and emphasis away from Libya may—in the future—create difficulties.

## ENDNOTES

[1] Remarks by the President, *President Bush: Libya Pledges to Dismantle WMD Programs*, White House Press Secretary (Dec. 19, 2003), available at http://www.whitehouse.gov/news/releases/2003/12/200331319-9.html (accessed March 7, 2005).

2 Interview with senior administration officials (Sept. 22, 2004). The teams did not uncover any evidence of a current biological weapons program, nor has Libya admitted the existence of biological weapons materials or facilities as part of the disclosures made under its agreement with the United States and United Kingdom. DIA, Title Classified (Feb. 24, 2004).

[3] Executive Order No. 13357 (Sept. 22, 2004) (terminating the national emergency with respect to Libya, which led to the effective end of that sanctions regime). Libya continues to be designated as a State Sponsor of Terrorism, however, and sanctions based on that designation remain in place.

[4] Reporting may have slightly understated the quantity of yellowcake. NIC, Title Classified (NIE 2004-05HJ) (May 2004) at p. 48.

[5] Interview with State Department/INR analysts (Sept. 8, 2004). Department of Energy analysts announced in February 2005 their view that the material was from North Korea. Glenn Kessler, "North Korea May Have Sent Libya Nuclear Material, U.S. Tells Allies," *Washington Post* (Feb. 2, 2005) at p. A1.

[6] NIC, Title Classified (May 2004) (NIE 2004-05HJ).

[7] *Id*. at p. 48.

[8] The CIA caveated this assessment, noting that Libya would "face significant technical challenges" to its nuclear program "that could lengthen the time needed to begin producing nuclear warheads." CIA, Title Classified (SPWR 021602-5) (Feb. 16, 2002). Moreover, an NIE cautioned that the judgments were based on the assumption that Libya would receive "foreign assistance in its fissile material production and weapon development efforts." NIC, Title Classified (NIE 2001 19HJ-I) (Dec. 2001) at p. E-37.

[9] NIC, Title Classified (NIE 2004-05HJ) (May 2004).

[10] *Id.* at p. 49.

[11] *Id*.

[12] Interview with CIA analysts (Sept. 10, 2004).

[13] NIC, Title Classified (NIE 2004-05HJ) (May 2004).

[14] *Id*. at p. 49.

[15] Interview with State Department/INR analysts (Sept. 8, 2004).

[16] CIA, Title Classified (SPWR 021602-5) (Feb. 16, 2002).

[17] CIA, Title Classified (SPWR 012203-02) (Jan. 22, 2003); Interview with CIA analysts (Sept. 10, 2004).

[18] NIC, Title Classified (NIE 2004-05HJ) (May 2004) at p. 49.

[19] Interview with State Department/INR analysts (Sept. 8, 2004).

[20] NIC, Title Classified (NIE 2004-05HJ) (May 2004) at p. 50; Interview with State Department/INR analysts (Sept. 8, 2004).

[21] CIA, Title Classified (SEIB011104-02) (Jan. 12, 2004) at p. 3.

[22] Interview with senior administration officials (Sept. 22, 2004).

[23] CIA, Title Classified (SEIB011104-02) (Jan. 12, 2004) at p. 3.

[24] *Id*.

[25] *Id*.

[26] Interview with CIA analysts (Sept. 10, 2004).

[27] *Id*.

[28] NIC, Title Classified (NIE 2004-05HJ) (May 2004).

[29] CIA, Title Classified (WINPAC IA 2004-003HCX) (Feb. 12, 2004) at pp. 14-15.

[30] Interview with CIA officials (Sept. 14, 2004).

[31] George J. Tenet, Director of Central Intelligence, Speech at Georgetown University, February 5, 2004, available at http://www.cia.gov/cia/public_affairs/speeches/2004/tenet_georgetownspeech_02052004.html (accessed Jan. 18, 2005)

[32] Interview with CIA officials (Sept. 14, 2004).

[33] CIA, Title Classified (WINPAC IA 2004-003HCX) (Feb. 12, 2004) at p. 6.

[34] Interview with CIA officials (Sept. 14, 2004).

[35] *Id*.

[36] Interview with CIA analysts (Sept. 10, 2004); *see also*, e.g., Senior Panel Review, *Mediterranean WMD Implications Game II* (Dec. 12, 2002).

[37] Interview with CIA analysts (Sept. 10, 2004).

[38] NIC, Title Classified (NIE 2001 19HJ-I) (Dec. 2001).

[39] Interview with CIA officials (Sept. 14, 2004); CIA, Submission to the Commission (March 9, 2005).

[40] Interview with CIA analysts (Sept. 11, 2004).

[41] CIA, Title Classified (July 18, 2003). Similarly, since the disclosures, analysts have asked the red cell to examine the possibility that Qadafi's agreement to abandon these programs is merely temporary. Interview with CIA ballistic missile analysts (Sept. 10, 2004). *See, e.g.*, Senior Panel Review, *Mediterranean WMD Implications Game II* (Dec. 12, 2002). Analysts have also worked closely with collectors to reassess existing sources and information in light of the revelations.

[42] Interview with CIA analyst (Nov. 14, 2004).

[43] NIC, Title Classified (NIE 2001 19HJ-I) (Dec. 2001).

[44] Chapter One (Iraq).

[45] Interview with State Department/INR analysts (Sept. 8, 2004); Interview with State Department official (Sept. 24, 2004).

[46] Interview with senior administration officials (Sept. 22, 2004); Interview with State Department/INR analysts (Sept. 8, 2004).

[47] Interview with State Department/INR analysts (Sept. 8, 2004)

[48] Interview with NGA analysts (Sept. 9, 2004); Interview with CIA analysts (Sept. 10, 2004).

[49] Policymakers are also concerned with Libyan progress on human rights, domestic political and economic modernization, and regional political developments; the Intelligence Com-

munity will be expected to provide key support on these more traditional intelligence issues. Interview with State Department official (Sept. 24, 2004).

[50] *See, e.g.*, Interview with CIA officials (Sept. 14, 2004) (noting that the priority for new sources will be to verify Libya's past disclosures).

[51] Interview with CIA analysts (Sept. 10, 2004).

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

## Summary & Findings

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

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

## INTRODUCTION

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

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

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

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

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

## Biological Weapons

### Finding 1

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

### *Pre-War*

Information in the Intelligence Community's possession since the late 1990s indicated that al-Qa'ida's members had trained in crude methods for producing biological agents such as botulinum toxin and toxins obtained from venomous animals.[1] But the Community was uncertain whether al-Qa'ida had managed to acquire a far more dangerous strain of agent (an agent we cannot identify precisely in our unclassified report and so will refer to here as "Agent X").[2] The Community judged that al-Qa'ida operatives had "probably" acquired at least a small quantity of this virulent strain and had plans to assemble devices to disperse the agent.[3] While the Community believed that a facility to which the group had access provided the potential capability and expertise to produce biological agents, it had no evidence that the facility was being so used.[4] Likewise, the Intelligence Community assessed that al-Qa'ida was "highly unlikely" to have acquired two other dangerous biological agents, and had no credible reporting indicating it was attempting to do so.[5]

### *Post-War*

In fact, al-Qa'ida's biological program was further along, particularly with regard to Agent X, than pre-war intelligence indicated.[6] The program was extensive, well-organized, and operated for two years before September 11, but intelligence insights into the program were limited. The program involved several sites in Afghanistan.[7] Two of these sites contained commercial equipment and were operated by individuals with special training.[8] Documents found indicated that while al-Qa'ida's primary interest was Agent X, the group had

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

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

## Chemical Weapons

### Finding 2

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

### *Pre-War*

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

### *Post-War*

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

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

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

## Radiological and Nuclear Weapons

**Finding 3**

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

### *Pre-War*

The Intelligence Community assessed that al-Qa'ida was unlikely to have built a nuclear device or obtained sufficient fissile material for a nuclear weapon, and was "significantly less likely" to have acquired a complete nuclear weapon.[22] However, the Community lacked a high confidence level in these judgments because of "substantial" information gaps.[23] Analysts were apparently most worried about the possibility that al-Qa'ida could obtain nuclear material from outside sources.[24]

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

The Intelligence Community could not ultimately reach a definitive conclusion about whether al-Qa'ida possessed radiological material that could be dispersed via conventional weaponry.[27] Considering the wide availability of radiological materials and the fact that al-Qa'ida training manuals discussed the use of such substances for assassinations,[28] the Intelligence Community concluded that such a weapon was well within al-Qa'ida's capabilities.[29]

### Post-War

Documents found at sites used by al-Qa'ida operatives indicated that the group was interested in nuclear device design.[30] In addition, al-Qa'ida had established contact with Pakistani scientists who discussed development of nuclear devices that would require hard-to-obtain materials like uranium to create a nuclear explosion.[31]

In May 2002, technical experts from CIA and the Department of Energy judged that there remained no credible information that al-Qa'ida had obtained fissile material or acquired a nuclear weapon.[32] Analysts noted that collection efforts in Afghanistan had not yielded any radioactive material suitable for weapons, and that there were no credible reports of nuclear weapons missing from vulnerable countries.[33]

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

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

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

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

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

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

**Finding 4**

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

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

targets.[37] The National Intelligence Estimate went on to describe further the nature of the intelligence gaps.[38]

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

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

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

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

### Finding 5

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

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

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

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

**Finding 6**

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

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

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

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

## CONCLUSION

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

## ENDNOTES

[1] National Intelligence Council (NIC), Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 4.

[2] *Id*. at pp. 4-5.

[3] *Id*. at p. 1.

[4] *Id*. at p. 7.

[5] *Id*. at p. 8.

[6] DCI's Counterterrorist Center, Title Classified (May 23, 2002) at p. 1.

[7] NIC, Title Classified (NIE 2004-08HC/I) (Dec. 2004) at p. 117; DIA, Submission to the Commission (March 2, 2005).

[8] *Id*.

[9] *Id*. at pp. 117-118.

[10] *Id*. at p. 118.

[11] DCI's Counterterrorist Center, Title Classified (May 23, 2002) at p. 2; DIA, Submission to the Commission (March 2, 2005).

[12] *Id*. at p. 1.

[13] NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001).

[14] *Id*.

[15] *Id*.

[16] *Id*. at p. 1.

[17] DCI's Counterterrorist Center, Title Classified (May 23, 2002).

[18] In August 2002, CNN obtained a large archive of al-Qa'ida video. Among the 64 cassettes was material showing operatives experimenting with lethal chemical gas on three dogs. Nic Robertson, *Tapes Shed New Light on Bin Laden's Network* (CNN Aug. 18, 2002), *available at* archives.cnn.com/2002/US/ 08/18/terror.tape.main/ (accessed March 10, 2005).

[19] DCI's Counterterrorist Center, Title Classified (May 23, 2002) at p. 4.

[20] *Id*.

[21] CIA, Submission to the Commission (March 10, 2005).

[22] NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 8.

[23] *Id*.

[24] *Id*. The Intelligence Community was also aware that during the U.S. trial of Usama Bin Laden and others for the August 7, 1998 bombings of the East African embassies, prosecution witness Jan Ahmade al-Fadl detailed efforts to assist Bin Laden in an attempt to acquire uranium from a source in Sudan in late 1993 and early 1994.

[25] Tim Weiner, "Bin Laden Asserts He Has Nuclear Arms," *New York Times* (Nov. 10, 2001) at p. B4 (recounting Bin Laden's assertion in the Pakistani English-language daily newspaper, *Dawn*, that "[w]e have chemical and nuclear weapons as a deterrent and if America used them against us, we reserve the right to use them").

[26] CIA, Title Classified (WINPAC IA 2001-060) (Nov. 23, 2001).

[27] NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 8.

[28] DCI's Counterterrorist Center, Title Classified (May 23, 2002).

[29] NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001).

[30] DCI Counterterrorist Center, Title Classified (May 23, 2002) at p. 3.

[31] *Id*.

[32] *Id*.

[33] *Id*. at p. 4.

[34] CIA, Submission to Commission (March 4, 2005).

[35] *Id*.

[36] NIC, Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 12.

[37] *Id*. at pp. 9, 12.

[38] *Id*. at p. 12.

[39] Interview with CIA analysts and other Intelligence Community senior analysts (Sept. 28, 2004).

[40] *Id*.

[41] *Id*.

[42] It was perhaps never more so than during much of the decade leading up to the September 11 attacks, when the Intelligence Community was only beginning to awaken to and focus in earnest on the emerging threat of non-state terrorist groups. During that time, collection and analytical emphasis remained primarily focused on state actors, rather than terrorist organizations. Concurrently, the Intelligence Community was facing a resource crisis as a part of post-Cold War budget cuts. In addition, based on our interviews with analysts from several agencies and our review of the written record, it is clear to us that between 1991 and 1996 (while Usama Bin Laden was operating in Sudan), the Intelligence Community paid little attention to collection activities in Afghanistan, or maintenance of the covert infrastructure the CIA had developed there as a result of its anti-Soviet activities in the 1980s.

[43] Interview with CIA analysts and other Intelligence Community senior analysts (Sept. 28, 2004).

[44] Title Classified (ICA 2001-07HC) (Oct. 22, 2001) at p. 12.

[45] We found one exception to the general lack of technical analysis and context, involving a Senior Executive Intelligence Memo in early 2001 in which CIA and nuclear experts speculated on why Usama Bin Laden might be seeking to use uranium with conventional explosives. Several technical scenarios were briefly examined.

[46] CIA, Title Classified (WINPAC IA 20001-060) (Nov. 23, 2001) at p. 1.

# CHAPTER FOUR
# TERRORISM: MANAGING TODAY'S THREAT

## Summary & Findings

As part of the Commission's charter to assess whether the Intelligence Community is properly postured to support the U.S. government's efforts to respond to the threats of the 21st century, we reviewed the progress the Intelligence Community has made in strengthening its counterterrorism capabilities since the September 11 attacks. We found that, although the Community has made significant strides in configuring itself to better protect the homeland and take the fight to terrorists abroad, much remains to be done to ensure the efficient use of limited resources among agencies responsible for counterterrorism intelligence. The U.S. government has not yet successfully defined the roles, missions, authorities, and the means of sharing information among our national and homeland security organs. Specifically, we found that:

- Information flow between the federal, state, local, and tribal levels—both up and down—is not yet well coordinated;
- Ambiguities in the respective roles and authorities of the National Counterterrorism Center and the Intelligence Community-wide Counterterrorist Center have not been resolved;
- Persistent conflicts over the roles, missions, and authorities of counterterrorism organizations may limit the Community's ability to warn of potential threats;
- Confusion and conflict regarding the roles, missions, and authorities of counterterrorism organizations have led to redundant efforts across the Community and inefficient use of limited resources; and
- The failure to manage counterterrorism resources from a Community perspective has limited the Intelligence Community's ability to understand and warn against terrorist use of weapons of mass destruction.

## INTRODUCTION

Providing intelligence that facilitates the global war on terrorism and warns against terrorist use of weapons of mass destruction is currently the Intelligence Community's most vital mission. There is every reason to believe that this will remain the top priority for a generation or more. As a result, it is impossible to reach broad conclusions regarding the Intelligence Community's overall performance, and develop meaningful suggestions for improvement and reform, without an understanding of Intelligence Community capabilities with regard to countering the terrorist threat—both now and in the future.

We did not set out to study "terrorism" writ large; such an ambitious endeavor is beyond the scope and time allotted to this Commission. Rather, we chose to focus narrowly on examining several well-documented weaknesses inherent in the Intelligence Community's counterterrorism capabilities prior to the September 11 attacks, and on measures the Intelligence Community has subsequently taken to remedy those deficiencies. Our work thus focused on four primary areas:

1. The status of *information sharing* among federal agencies with foreign and domestic intelligence and law enforcement responsibilities, as well as between federal agencies and state, local, and tribal law enforcement;

2. The effectiveness of the *threat-warning* mechanism by which policymakers are kept informed of potential terror threats;

3. The ability to synthesize relevant *all-source terrorism analysis* in a timely manner; and

4. The Intelligence Community's ability to provide the intelligence necessary to interdict a planned *terrorist attack using a weapon of mass destruction.*

We conclude that although the Intelligence Community has made significant strides in each of these areas, much remains to be done. We found substantial evidence that information flows between the federal level and the state, local, and tribal levels—both upward and downward—are not yet well coordinated.

The roles and responsibilities among Intelligence Community agencies charged with primary responsibility for terrorism intelligence—both tactical and strategic—are not clearly defined. Sustained bureaucratic infighting and poor coordination prevent the Community from optimizing its resources to fight terrorism and alert policymakers to terrorist threats. Moreover, Community efforts to integrate technical and regional intelligence expertise with counterterrorism analysis do not provide sufficient focus on the threat posed by weapons of mass destruction in the hands of terrorists.

Resolving complex bureaucratic issues that transcend agency and subject-matter boundaries is usually difficult. However, three and a half years removed from the September 11 attacks, the persistence of agency coordination problems and unclear definitions of responsibility suggest to us a lack of Community leadership. The intelligence entities responsible for counterterrorism, especially terrorism analysis and threat warning, must be properly aligned, supported, and integrated for the task at hand.

## SYSTEMIC FLAWS AS OF THE "SUMMER OF THREAT"

It is well-established that the Intelligence Community's structure and practices prior to the September 11 attacks were simply not up to the task of waging a global war on terror and protecting the homeland. The systemic Intelligence Community deficiencies during the "Summer of Threat" leading up to the attacks were summed up by the 9/11 Commission in two short sentences: "Information was not shared… Analysis was not pooled."[1] For present purposes, we highlight three of the specific failings identified by the 9/11 Commission in its examination of the Intelligence Community before September 11.

First, prior to September 11, there was a failure to share terrorism-related information rapidly and efficiently within agencies; among entities within the Intelligence Community tasked with producing intelligence to support counterterrorism efforts, and with state, local, and tribal law enforcement. For example, the FBI lacked basic computer capabilities, and did not share information even within its own organization. The CIA and the FBI were unwilling or unable to exchange information quickly and effectively with each other. And the Immigration and Naturalization Service and FBI did not learn from

the CIA which identified terrorists were entering the United States and where they might be.[2]

Second, the Intelligence Community's analysts were ill-equipped to "connect the available dots" that might have led to advance warning of the September 11 attacks.[3] The "dispersal of effort on too many priorities" and the "declining attention to the craft of strategic analysis" were among the shortcomings identified by the 9/11 Commission's staff.[4] The CIA published many useful analytical reports on terrorism before the attack, but the Intelligence Community failed to produce a comprehensive, cross-cutting assessment of the threat. Analysts had difficulty carving out time to work on longer-term analyses that could have unified disparate elements of intelligence and pointed to the existence of a growing threat or particular vulnerability.[5]

Third, there was a lack of coordinated effort among the major federal agencies tasked with counterterrorism responsibilities, and confusion as to the roles and responsibilities of those agencies. Because the CIA and FBI lacked an optimized, cooperative analytical and operational effort, they were not well configured to detect and counter a threat, like that posed by the September 11 plotters, which "fell into the void between foreign and domestic threats." [6]

## NOTABLE IMPROVEMENTS SINCE THE SEPTEMBER 11 ATTACKS

We found evidence that this grim picture has improved in many respects since September 11. In the information sharing arena, for example, consolidation of terrorist "watchlists" and expanded use of those lists for screening purposes have increased the likelihood of detecting known or suspected terrorists and obtaining additional information about them.[7] Moreover, counterterrorism information sharing has increased in quantitative terms—that is, terrorism intelligence products are disseminated more broadly, and are produced by more agencies, than before September 11.[8]

Similarly, the Intelligence Community has remedied many of the analysis-related problems it faced leading up to the September 11 attacks. In particular, the Community increased its analytic efforts on terrorism-related issues, including analytic support to operations, and at the President's direction established the Terrorist Threat Integration Center (TTIC, now the National

Counterterrorism Center, or NCTC) as the Community's center for analysis on these topics.[9] Many analysts arrive with substantial experience gained from working on terrorism accounts at the DCI's Counterterrorist Center (CTC),[10] an organization originally based at the CIA and staffed primarily by CIA officers that also includes representatives from throughout the Community. Analysts are increasingly being assigned to the NCTC for two-year rotations instead of short-term, stop-gap stints, enabling it to develop some badly-needed depth of expertise among its analytic corps.[11] Perhaps most significantly in light of the criticisms leveled by the 9/11 Commission, the NCTC is producing analytic products that integrate the comments and concerns of analysts across the Community.[12]

Moreover, the President's Terrorist Threat Report, a daily analytic publication produced by the NCTC, is truly a Community effort—with five agencies regularly contributing and a production schedule established by regular interagency meetings.[13] Prior to the September 11 attacks, it was far from clear that the intelligence resources of all the relevant agencies in the Intelligence Community were being tapped to create a complete picture of terror threats for senior policymakers. In contrast, the NCTC now hosts "ecumenical" meetings five days a week, in which managers representing CIA, FBI, DIA, NSA, and the Departments of State and Homeland Security[14] share and discuss intelligence regarding key terror threats.[15] The NCTC also meets five times weekly with senior representatives of CIA, FBI, DIA, and Homeland Security at a formal planning production board to divide responsibility for drafting analytical products (mainly those which will appear in the President's threat report) and to share information.[16] This process represents a level of formal and informal interaction on the terrorist threat among the primary intelligence agencies that simply did not exist prior to September 11, and that seems to clearly represent an improvement in the identification of threats and the mechanism through which threat warning intelligence is provided to senior policymakers.[17]

In our view the overall quality of finished analytic pieces on terrorism has also improved. Analysts in the Community now have access to substantially more information as the result of the Intelligence Community's heightened prioritization of the terrorism issue, the availability of intelligence from new collectors (particularly FBI and Homeland Security), and expanded access to information about human intelligence sources.[18]

Perhaps most importantly, from an operational perspective it is clear that many of CTC's efforts to disrupt terrorist networks and plots—partially enabled by its in-house analytic cadre—have been extraordinary successes. Put simply, CTC has brought the fight to the terrorists.

Finally, we have found that September 11 and the subsequent anthrax attacks not only triggered an aggressive counterterrorism response throughout the U.S. government, but also prompted the Community to reconsider its approach to the possible acquisition and use of weapons of mass destruction by terrorists, which we refer to by short-hand throughout this case study as "WMD terrorism." In December 2002, in the midst of post-September 11 bureaucratic realignment, the President announced a national strategic policy on weapons of mass destruction.[19] The President called for the application of new technologies, increased emphasis on intelligence collection and analysis, the strengthening of alliance relationships, and the establishment of new partnerships with former adversaries. The main pillars of the President's program included interdiction efforts, nonproliferation programs, and consequence management. In particular, he called for an emphasis on improving intelligence regarding weapons of mass destruction facilities and activities, expanding the interaction among U.S. intelligence, law enforcement, and military agencies, and enhancing intelligence cooperation with friends and allies.[20]

High-level attention within the policy and intelligence communities has had an important impact on the WMD terrorism issue. Our interviews suggest that the Intelligence Community now has a more extensive operational capability dedicated to the problem, has enhanced its intelligence reporting and analysis functions, and has instituted a more robust effort to address the problem domestically. Moreover, the Community appears at least to recognize the unique characteristics of unconventional weapons in the terrorism context, as other organizations have followed the CIA's lead in placing additional—although not yet sufficient—resources for WMD terrorism into the counterterrorism effort.

Since September 11, the reallocation of resources to respond to WMD terrorism has resulted in significant improvements in both foreign and domestic intelligence. We understand that within the Intelligence Community, sources have gotten better, the amount of data available has dramatically increased, and intelligence is more harmonized, consistent, and less reliant on vague

"chatter." On the domestic side, there have been significant attempts to disrupt terrorist means of delivery.[21]

Despite all of these noteworthy developments, our study found that the Community still has a long way to go before it can claim to have optimized its counterterrorism capabilities or fully fixed the serious deficiencies that existed prior to September 11. We thus turn to the areas where the picture is not as promising.

We begin by focusing on needed improvements in the sharing of terrorism information with state, local, and tribal governments. Next, we examine the more general bureaucratic "turf war" between agencies, and the pronounced lack of clarity as to the roles, responsibilities, and authorities involving various entities tasked with the counterterrorism mission—particularly the NCTC and the Counterterrorist Center. Finally, we examine the continuing coordination problems between the CIA, FBI, and Homeland Security in addressing the threat posed by WMD terrorism.

## INFORMATION SHARING: MUCH ROOM FOR IMPROVEMENT

### Finding 1

Although terrorism information sharing has improved significantly since September 11, major change is still required to institute effective information sharing across the Intelligence Community and with state, local, and tribal governments.

For a number of years before the September 11 attacks, the Intelligence Community closely followed the al-Qa'ida terrorist threat, yet failed to adequately exploit information it had concerning several individuals who were either involved in the planning of or participated in the attacks.[22] Although the 9/11 Commission did not find that better information sharing would have prevented the attacks, at least nine of the ten "operational opportunities" that the commission identified as missed opportunities to possibly thwart the plot pertain to some form of a failure to share information.[23] These perceived failures have made "information sharing" a mantra for intelligence reform for the three and a half years since the attacks.

We have found that as a general matter, the Intelligence Community has sought to improve terrorism information sharing by modifying the structures and processes for sharing that were in place prior to September 11—rather than establishing wholly new approaches. We agree with the recent assessment of the Intelligence Community Inter-Agency Information Sharing Working Group, which found that "[a] great deal of energy…is being expended across the [Intelligence Community] to improve information sharing. However, the majority of these initiatives *will not produce the enduring institutional change required to address our current threat environment*."[24]

The importance of effective sharing of information at all levels of the Intelligence Community is discussed in several chapters of our report, but particularly in Chapters Nine (Information Sharing) and Eight (Analysis). In this section, we specifically address the Intelligence Community's efforts, since September 11, to improve the sharing of terrorism information across the Intelligence Community and with state, local, and tribal governments. Our specific findings are categorized in four broad areas.

First, we found substantial improvement in information sharing relating to terrorist watchlisting and screening. "Watchlisting"—the process of assembling databases of known or suspected terrorists—was not well coordinated among federal agencies prior to September 11, but several effective reforms have been implemented in the wake of the attacks.[25] For example, the new Terrorist Screening Center—an interagency effort to consolidate terrorist watchlists and provide operational support for federal employees around the world, 24 hours a day, seven days a week—now administers a single database that combines international and domestic terrorism data provided by the NCTC and FBI. The database also integrates information from immigration and customs offices, the Transportation Security Administration, the U.S. Marshals Service, Department of Defense, and Interpol. The Terrorist Screening Center ensures that government investigators, screeners, and agents are working from the same comprehensive information and that they have access simultaneously to information and experience that will allow them to act quickly when a suspected terrorist is screened and stopped.

Second, we have found that the sharing of counterterrorism information has increased in quantitative terms—more terrorism information is being shared with more entities both inside and outside the Intelligence Community than before the September 11 attacks. This has largely occurred through the

increased use of "tearlines"—the practice of generating intelligence reports at several different classification levels so it can be shared with a cross-section of federal, state, local, and tribal officials—which has resulted in more releasable information being provided to consumers.[26] And security-based sharing restrictions have been substantially reduced, allowing analysts and security personnel greater access to the information they need to do their jobs.[27]

All this being said, problems remain. While the Intelligence Community has reduced its use of restrictions on further dissemination of intelligence products without the consent of the originator,[28] inconsistent application of dissemination restrictions, such as ORCON ("originator controlled"), continue to impede the flow of useful terrorism information.[29] In relations with state, local, and tribal authorities, more terrorism information is being shared, but federal officials continue to have difficulty establishing consistent and coordinated lines of communication with these officials.[30] In this regard, we have found that there is no comprehensive policy or program for achieving the appropriate balance regarding what terrorism information to provide to state, local, and tribal authorities and how to provide it. Additionally, the redundant lines of communication through which terrorism-related information is passed—for example, through the Joint Terrorism Task Forces, Anti-Terrorism Advisory Councils, Homeland Security Information Network, TTIC Online, Law Enforcement Online Network, Centers for Disease Control alerts, and Public Health Advisories, to name just a few—present a deluge of information for which state, local, and tribal authorities are neither equipped nor trained to process, prioritize, and disseminate.

Our third category of findings relates to the sharing of information to ensure that analysts throughout the Intelligence Community have the widest possible access to information regardless of which agency collects the information. Today, the primary means of sharing information throughout the Community continues to be through interagency personnel exchange programs, such as the model used by the NCTC. These personnel exchanges can be quite effective, but they do nothing to improve the flow of information throughout those agencies or enable agencies to engage in competitive analysis based on access to the same set of information. Collectors of information continue to operate as though they "own" information and, in fact, collectors largely control access to the information that they generate. Decisions to withhold information are typically based on rules that are neither clearly defined nor consis-

tently applied, with no system in place to hold collectors accountable for inappropriately withholding information.

Finally, we have found that there is currently no single entity in the Intelligence Community with the responsibility and authority to impose a centralized approach to sharing information. Although the NCTC model has certainly facilitated improved information sharing on counterterrorism issues, it lacks sufficient authority and resources necessary to provide strong leadership in this area.

## COUNTERTERRORISM WARNING AND ANALYSIS: A STRUGGLE BETWEEN AGENCIES

Notwithstanding significant gains in terrorism intelligence since September 11, a number of problems remain. Our study found evidence of bitter bureaucratic "turf battles" between agencies, and a pronounced lack of clarity as to the roles, responsibilities, and authorities of various entities tasked with the counterterrorism mission. Specifically, this interagency jockeying over overlapping counterterrorism analytical responsibilities indicates that major organizational issues affecting the allocation of resources, assignment of responsibilities, coordination of analysis, and effective warning remain unresolved.

### Who's in Charge of Counterterrorism Analysis and Warning?

**Finding 2**

Ambiguities in the respective roles and authorities of the NCTC and CTC have not been resolved, and the two agencies continue to fight bureaucratic battles to define their place in the war on terror. The result has been unnecessary duplication of effort and the promotion of unproductive competition between the two organizations.

The Community's inability to implement a "one team, one fight" strategy in the terror war may be attributed both to ongoing bureaucratic battles between agencies charged with responsibility for counterterrorism analysis and warning, as well as the failure of Community leaders to effectively resolve these disputes and clearly define agency roles and authorities. The conflict and

ambiguity surrounding the role of the Terrorist Threat Integration Center during its abbreviated existence starkly illustrates both points.

After the September 11 attacks, TTIC was created for the purpose of improving the sharing of terrorist threat data and the analysis of terrorism-related information. However, as the Markle Foundation has reported, "the very fact of the TTIC's creation caused confusion within the federal government and among state and local governments" about the respective roles of TTIC and other federal agencies responsible for counterterrorism analysis and terrorist threat assessments.[31] Even today—despite being designated by the intelligence reform act as the preeminent, integrated center for threat warning and analysis—the NCTC continues to have difficulty asserting its primacy for the terrorism warning mission.

This dispute—and the potential problems to which it could lead—has been apparent since February 2003, when Senators Collins and Levin highlighted the issue in a joint letter (the "Collins-Levin Letter") to the Secretary of Homeland Security, the Director of TTIC, and the Directors of Central Intelligence and the FBI. The letter asked that the officials clarify responsibilities among counterterrorism elements of the U.S. government. In their April 2004 response, the agency heads stated that "TTIC has primary responsibility in the [U.S. government] for terrorism analysis (except analysis relating solely to purely domestic terrorism) and is responsible for the day-to-day terrorism analysis provided to the President and other senior policymakers."[32] In order to make it possible for TTIC to achieve this mission, the letter further stated that the DCI, in consultation with the other leaders of the Intelligence Community, would determine by June 1, 2004, what additional analytic resources would be transferred to TTIC from the CTC.[33]

Despite this unequivocal statement, TTIC was never able to fully perform its mission. Other entities, CTC in particular, differed over the level of support they should provide to TTIC and resisted supplying it with an adequate number of detailees—thus hampering TTIC's ability to assume the leading role assigned to it.

In May 2004, TTIC Director John Brennan sent correspondence to then-Director of Central Intelligence George Tenet, explaining how TTIC intended to carry out the responsibilities identified in the Collins-Levin letter. He warned that lacking significant new analytic resources, TTIC would not be

able to carry out the mission of having "primary responsibility" for providing terrorism analysis to the President and senior policymakers.[34]

The next month, Director Brennan sent the DCI a follow-up memorandum entitled "TTIC at the Breaking Point." In this memorandum, he argued that other intelligence agencies had failed to provide sufficient numbers of analysts to TTIC, and that the personnel that had been provided possessed only limited competency or a low level of experience. He further noted that these agencies continued to insist on developing their own independent counterterrorism analytical capabilities. This organizational multiplicity, Director Brennan argued, had created not only a "dangerous shortfall in TTIC's analytic resources and mission," but also "unnecessary analytic redundancy within the intelligence, law enforcement, defense, and homeland security communities."[35] In sum, Director Brennan wrote, a general refusal by entities within the Intelligence Community to "sign on to the fundamental premise that resources and mission will migrate to TTIC" had left the Center "unable to fulfill the mission of 'primary responsibility' for terrorism analysis in the U.S. government," and had forced the U.S. government into a "retreat from the integration model" of terrorism analysis and threat warning.[36]

Approximately one week later—on July 2, 2004—then-Deputy Director of Central Intelligence John McLaughlin attempted to address Director Brennan's concerns by outlining (at the DCI's request) a "division of resources and analytical responsibilities" between CIA and TTIC.[37] In interviews with this Commission, Director Brennan repeatedly stated that he had not received an official answer to his urgent memos of May and June.[38] When later asked specifically about the July 2 response, he dismissed it as failing to provide a meaningful answer to the basic questions he had raised regarding allocation of responsibilities for counterterrorism analysis and warning—despite the fact that the July 2 memorandum does in fact deal with virtually every issue highlighted by Director Brennan.[39]

The memorandum may not have been the answer Director Brennan wanted, but it certainly constituted a clear attempt by the Community's leadership to allocate roles, responsibilities, and resources among counterterrorism organizations. Addressed to CIA's Deputy Directors for Intelligence and Operations, as well as to Director Brennan, the memorandum provided for the immediate transfer of 60 personnel to TTIC, but it did not provide the "primary responsibility" over terrorism analysis for TTIC that Director Brennan had requested.

In fact, the memorandum declined to grant TTIC sole authority over analysis pertaining to international terrorist networks, instead explicitly stating that other agencies (including CTC) would continue sharing that function. The memorandum acknowledged that this would result in redundancy, but argued that "on something as important as terrorism analysis," some overlap between agencies was to be preferred.[40]

Although we believe that excessive redundancy in Community counterterrorism efforts is wasteful of scarce resources and thus counterproductive (see our discussion below), we express no view on the overall merits of the organizational plan and division of labor outlined in the July 2, 2004 memorandum. However, it is of great significance, we think, that the Community was ultimately unable to enforce that plan—or, to date, *any* plan—and bring an end to the interagency squabbling between CTC and NCTC.

We have been told that the plan outlined in the July 2 memorandum fell victim to bureaucratic neglect and rapid change within the Community; shortly after its distribution there was turnover in the DCI's office, and ambiguities fostered by creation of the NCTC by executive order and, later, passage of the intelligence reform act, raised new questions about the designated roles of the nation's counterterrorism organizations. Our study suggests that there may have been another factor, as well: the entrenched opposition of both CTC and NCTC to effectively cooperating or consolidating aspects of their authorities.

The fact that Director Brennan did not regard clear direction from the DCI to be an "answer" to his pleas to resolve confusion over roles, resources, and responsibilities—presumably because it did not allocate the prerogatives to his organization that he had requested—speaks volumes about the hardened mindsets of the two organizations' leadership, and their desire to protect or expand their bureaucratic "turf." As the Director of the Counterterrorist Center characterized the relationship, the Center "is fighting a war with TTIC." [41]

Although recent passage of the intelligence reform act may resolve issues related to responsibilities and resources,[42] the history of the dispute tempers our optimism. Whatever the precise allocation of resources and responsibilities is to be, the DNI must act quickly to resolve the issue. Absent strong leadership, other organizations in the Intelligence Community may continue to resist providing resources to NCTC, as they did with TTIC, and may dispute its "primary" role in coordinating terrorism intelligence.[43] Alternatively,

NCTC may resist well-reasoned direction to permit CTC to continue performing several of its important functions. If so, the war between agencies that are tasked to fight the war on terror will continue. Unfortunately, such a conflict constitutes far more than a common bureaucratic dispute, the sort of administrative power struggle so common in the corridors of government. Rather, it has profound operational implications for the ability of the Intelligence Community to perform the all-important function of providing terrorism analysis and warning information to policymakers.

## A Failure to Warn with One Voice

### Finding 3

Persisting ambiguities and conflicts in the roles, missions, and authorities of counterterrorism organizations hamper effective warning.

The dispute between the NCTC and CTC is especially troubling in the context of threat warning—the process by which threat information is conveyed to decisionmakers in time for them to take action to manage or deter the threat. Continuing disagreements about the two offices' roles and missions have in the past led to inconsistent warning messages being conveyed to decisionmakers and—far more troubling—these warnings were conveyed in a manner that may have sowed confusion.

### What Part of "Warning" Should Be Competitive?

For present purposes, we divide warning into two components: (1) the *analytic* function that produces a warning and (2) the *process of communicating* those threat judgments to decisionmakers. As a general matter, while we strongly endorse competitive *warning analysis* (*i.e.*, competition in the first component of warning), we believe that the process of communicating threats to decisionmakers (*i.e.*, the second component) should be coordinated and integrated. We say this because we do not believe decisionmakers are well-served by incoherent, uncoordinated warnings of impending threats. Rather, warning should be presented to decisionmakers in a coordinated manner that makes clear the level of certainty with which they are held.

According to NCTC officials, the NCTC must have primacy, if not exclusivity, in providing warning intelligence to the President and controlling the analytical resources required for this mission.[44] NCTC principals acknowledge that CTC needs to retain analytical capability to directly support the CIA's Directorate of Operations (DO)—and to continue the spectacular successes the DO has achieved in the war on terror.[45] However, as a general matter they assert that it is improper to "divide effort when it comes to terrorism,"[46] and have claimed as a core responsibility the "production of terrorist threat warnings, advisories, and alerts," which are to be "issued by [the NCTC] alone or as formally coordinated products of the 'Warn 7.'"[47] Moreover, in its role as coordinator of the President's Terrorist Threat Report (PTTR), the NCTC insists that it has oversight responsibility for determining what terrorism analysis is provided to the President.[48] In sum, the NCTC conceives its mission as providing coordinated threat warning and analytical reports—reflecting "diversity of viewpoint but coordination of common response"—to senior policymakers.[49]

Perhaps unsurprisingly, CTC does not embrace this division of labor. CTC views itself as the preeminent counterterrorism entity within the Intelligence Community.

In CTC's view, NCTC's main contribution to the terrorism fight lies in its access to intelligence information and databases—both foreign and domestic.[50] As a result, CTC leaders expressed to us the view that the NCTC should be responsible for generating an integrated Community view of threats, but should *not* have the dominant voice in counterterrorism analysis and warning.[51] A recent example of where this theoretical disagreement had concrete consequences is discussed in our classified report, but cannot be detailed in an unclassified format.

Ideally, a single warning vehicle (such as the President's Terrorist Threat Report, now provided daily by the NCTC) should provide a forum for ensuring that policymakers do not receive inconsistent messages. But we have seen evidence that this is not always so. It is further possible that legislation creating the NCTC may obviate such interagency conflicts in the future—but we are only guardedly optimistic.[52] In this sense, we believe that the DNI will have to create mechanisms by which competitive analysis for warning is maintained, and the dissemination of warnings is carefully coordinated. We address this issue more fully in Chapter Eight of our report (Analysis). More

broadly, the DNI will have to force the nation's counterterrorism organizations to concentrate more fully on fighting terrorists, rather than each other.

## Maintenance of Redundant Capabilities

### Finding 4

Persistent ambiguities and conflicts in the roles, missions, and authorities of counterterrorism organizations with regard to analysis and warning have led to redundant efforts across the Community and inefficient use of limited resources.

An absence of clearly defined roles and authorities with regard to analysis and warning leads inevitably to competition in key capabilities, and redundant efforts across the Community. For example, we spoke with a senior analytic manager who recounted one incident in which a single raw intelligence report spurred five different agencies to write five separate pieces, all reaching the same conclusion. Not only were analysts' efforts redundant, but policymakers were then required to read through all five papers to look for subtle differences in perspective that could have been better conveyed in a single, coordinated paper.[53]

This phenomenon is especially troubling given the scarce analytic resources available for counterterrorism efforts. Agencies expressed serious concern about their ability to engage in long-term strategic analysis given the demands generated by customer questions and daily indicators of new threats.[54] For example, the NCTC spends roughly 70 percent of its time on immediate threats,[55] primarily because analysts have to run each potential threat to ground, even if it seems suspect from the outset.[56] Similarly, the FBI estimates that about 50 percent of analysts' time is spent on direct operational support.[57] All of these requirements tend to leave little time and resources for thoughtful, strategic work on new and emerging threats. All of this is, of course, compounded by the significant trouble agencies are experiencing in retaining qualified and experienced analysts.[58]

Despite this serious resource issue, there is ongoing evidence of an interagency failure to cooperate and efficiently divide responsibility in counterterrorism analysis. For example, NCTC WMD analysts with whom we spoke described their willingness and capability to engage in long-term, strategic analysis on behalf of

the counterterrorism community.[59] But when a senior CTC official—who noted the need for such analysis and lamented the difficulty of allocating time and resources for it in the context of CTC's operationally-driven environment—was asked about the possibility of using NCTC resources for that purpose, he stated bluntly that "[NCTC] doesn't have those capabilities."[60] It is unclear whether such statements reflect a lack of understanding between the two entities concerning complementary capabilities that could be mutually leveraged, institutional resentment and an unwillingness to operate collaboratively, or simply an ongoing struggle over personnel resources.

Again, although recent passage of the intelligence reform act may resolve issues related to responsibilities and resources,[61] we are not optimistic that anything in the legislation itself resolves the dispute. We address the issues associated with managing scarce analytic resources more fully in Chapters Six (Leadership and Management) and Eight (Analysis).

## THE FAILURE TO MANAGE COMMUNITY RESOURCES IN RESPONSE TO THE WMD TERRORISM THREAT

### Finding 5

The failure to manage counterterrorism resources from a Community perspective has limited the Intelligence Community's ability to understand and warn against terrorist use of weapons of mass destruction.

Recognizing that the worst terrorist attack would be one involving weapons of mass destruction, some elements within the Community have begun to incorporate analytic and collection capabilities with respect to the WMD terrorism threat into their counterterrorism organizations. At the same time, the CIA's Weapons Intelligence, Nonproliferation, and Arms Control Center provides intelligence support aimed at protecting the United States and its interests from all advanced weapons threats. Our review of the relationship among these various entities reveals that some systemic weaknesses are preventing the development of a focused, integrated, well-resourced bureaucracy that can most effectively combat the worst-case threat of a homeland terrorist attack. Specifically:

- There is no clear leadership or bureaucratic architecture defining roles and responsibilities for WMD terrorism. This adversely affects analysis, collection, and threat warning; and

- The domestic intelligence effort on WMD terrorism is lagging behind the U.S. government's foreign intelligence capabilities.

## Defining Roles and Responsibilities for the WMD Terrorism Threat

Notwithstanding the President's National Strategy to Combat Weapons of Mass Destruction promulgated in December 2002, the overriding concern of key officials whom we have interviewed is that, within the U.S. government, there is no overall direction and coordination on WMD terrorism. As the chief of the FBI's WMD Countermeasures Unit rhetorically asked, "[w]ho is ultimately responsible for preventing the use of a WMD?" [62]

The most significant consequence of the lack of coordination is that each organization appears to be defining its own mission and trying to make sure it has the resources to be self-sufficient across a broad range of responsibilities.[63] The result is predictable: duplicative roles, power vacuums where individual organizations assert their authority, and confusion within the Community. As the NCTC's head of analysis observed, it is necessary not only to clarify affirmative roles and responsibilities, but also to delineate those responsibilities for which agencies are *not* responsible.[64]

For example, despite changes since September 11, coordination problems between the FBI and the CIA continue to disrupt analysis on WMD terrorism and operations against weapons of mass destruction targets. As the FBI has expanded its overseas operations and the CTC tries not to lose its targets when they travel to the United States, coordination is essential. However, according to the head of the CTC's WMD unit, there is no sense of "jointness," or shared mission, on the part of the FBI and CTC, despite the co-location of portions of both organizations.[65]

It appears that coordination among domestic agencies responsible for responding to a potential WMD terrorist threat also suffers from confusion and a lack of coordination. For instance, the FBI told us that the Department of Homeland Security had, in response to a possible threat, taken the initiative to start moving radiation detection resources to New York during the Republi-

can National Convention without coordinating with the Bureau. Subsequent to the move, the "threat" was revealed to be a legitimate movement of a medical isotope.[66] Had even the most elemental communication and coordination taken place—in the form of a phone call from Homeland Security to the FBI—this fact might have surfaced earlier, thereby avoiding the squandering of limited counterterrorism resources.[67]

Perhaps most alarming is the allegation that when terrorism cases move from a purely foreign focus to a domestic emphasis requiring a hand-off in primary responsibility from the CIA to the FBI, the CIA finds it difficult to obtain information from the FBI about ongoing investigations.[68] Such gaps in cooperation, occurring at the vital fault line between foreign and domestic intelligence, are reminiscent of the "void" that the September 11 attack plotters operated in to achieve their objectives.[69]

The stark division between the Intelligence Community's WMD terrorism programs and the Community's state-based weapons of mass destruction programs further hampers the WMD terrorism effort.[70] As our case study of al-Qa'ida in Afghanistan also confirms, the personnel who work the WMD terrorism issue mostly coordinate with their state program counterparts on an *ad hoc* basis. Efforts have been made to remedy this problem within CIA,[71] but we think it vital that such cooperation be greatly expanded throughout the Community.

## The Domestic Intelligence Effort on WMD Terrorism

While the FBI has responded to the threat posed by WMD terrorism by increasing the resources dedicated to this issue, the FBI's efforts in this regard remain subordinated to the broader war on terror. For example, approximately a year ago, the FBI committed (on paper) to staffing its WMD Integration and Targeting Unit—the unit responsible for providing expertise on WMD terrorism—with a total of 26 staff positions. Today, the unit has only two people—the unit chief and a single intelligence analyst.[72]

Unsurprisingly, the FBI, like other agencies responsible for the WMD terrorism threat, is having difficulty finding people with the right expertise and has yet to develop a specific career track or program for developing expertise regarding the threat.[73] Other agencies having responsibility for WMD terrorism are also understaffed, and the few experts that do exist are suffering from

burnout.[74] To its credit, the FBI has acknowledged its need for more resources in this area,[75] but it is clear to us that the FBI's weaknesses are not susceptible to a quick fix. We discuss our proposals addressing this and related issues more fully in Chapters Six (Leadership and Management), Eight (Analysis), and Ten (Intelligence at Home).

## CONCLUSION

The Intelligence Community's capabilities with regard to current terror threats have improved significantly since September 11, 2001. Nevertheless, the continued lack of definitional clarity as to roles and responsibilities in the war on terrorism, and ongoing conflicts among key counterterrorism agencies, constitute an ongoing challenge—and one that we believe should be foremost on the mind of the new DNI.

## ENDNOTES

[1] National Commission on Terrorist Attacks Upon the United States, *The 9/11 Commission Report* (2004) (hereinafter "9/11 Commission Report") at p. 353.

[2] *Id*. at p. 371.

[3] *Id*. at pp. 277, 408-09.

[4] Eleventh Public Hearing of the National Commission on Terrorist Attacks Upon the United States, *Staff Statement Number 11* (April 14, 2004) at p. 3.

[5] *Id*. at p. 5.

[6] 9/11 Commission Report at p. 263.

[7] Interview with Terrorist Screening Center official (Nov. 9, 2004).

[8] Interview with TTIC senior officials (Oct. 19, 2004); Interview with DIA (JITF-CT) analysts (Oct. 26, 2004); Interview with Department of State (INR) analysts (Nov. 3, 2004).

[9] NCTC was created on December 6, 2004 pursuant to Executive Order. The establishment of NCTC is also codified by the *Intelligence Reform and Terrorism Prevention Act of 2004* (hereinafter "IRTPA"). Under IRTPA, NCTC subsumes the primary duties of TTIC, and is intended to serve as the governmental entity responsible for counterterrorism analysis and warning and for developing strategic operational plans for counterterrorism operations conducted by the U.S. government. Nevertheless, although the name has changed, the organization and its bureaucratic challenges remain essentially the same, and the identical problems surrounding TTIC that are discussed in this report threaten to envelope the newly-created NCTC. In this report, for ease of reference, when we use the term NCTC, we refer to both NCTC and its predecessor, TTIC, unless otherwise noted.

[10] Interview with TTIC senior analyst (Nov. 5, 2004).

[11] Interview with TTIC (WMD) analysts (Oct. 19, 2004).

[12] *Id*.

[13] Interview with TTIC senior analyst (Oct. 19, 2004); Interview with TTIC senior analyst (Nov. 5, 2004).

[14] Along with NCTC, these agencies have been dubbed the "Warn 7." Interview with TTIC senior analyst (Oct. 19, 2004).

[15] Interview with TTIC senior analyst (Oct. 19, 2004). During the "Summer of Threat" prior to the September 11 attacks, the interagency Counterterrorism Security Group (CSG), headed by Richard Clarke, had access to disseminated intelligence from several agencies, but it did not have the capability to integrate intelligence from each agency on a daily basis, nor did it have access to the internal, non-disseminated information of intelligence agencies. 9/11 Commission Report at p. 255.

[16] Interview with NCTC senior official (Feb. 4, 2005); Interview with TTIC senior analyst (Oct. 19, 2004); Interview with TTIC senior analyst (Nov. 5, 2004).

[17] The PTTR is produced six days a week, usually runs three to five pages in length, and may have, on average, one to four articles. It is delivered to the President and senior policymakers by the PDB briefers. Interview with TTIC senior analyst (Nov. 5, 2004).

[18] Interview with CTC (WMD) official (Oct. 22, 2004).

[19] National Security Presidential Directive 17, *National Strategy to Combat Weapons of Mass Destruction* (Dec. 2002).

[20] *Id*.

[21] Interview with FBI (WMD) officials (Oct. 14, 2004); Interview with FBI (Counterterrorism) official (Oct. 22, 2004).

[22] The 9/11 Commission identifies several instances in which sharing of information might have led to further investigation that could have revealed the plot, but does not conclude that the sharing of any specific pieces of information actually held would have likely led to preventing the attacks. *See, e.g*., 9/11 Commission Report at pp. 272, 276.

[23] *Id*. at pp. 355-356.

[24] *Calibration Report: Intelligence Community Collaboration and Information Sharing to Win the War on Terrorism: Phase 1* (May 2004) at p. ES-1 (hereinafter "IC Inter-Agency ISWG May 2004 Calibration Report") (emphasis in original).

[25] These watchlisting reforms were undertaken at the direction of the President, primarily under Homeland Security Presidential Directive 6, *Integration and Use of Screening Information* (Sept. 16, 2003).

[26] This finding is consistent with the conclusion of the Inter-Agency Information Sharing Working Group. *FY2004 Congressionally Directed Actions on Information Sharing, Consolidated Report of the Information Sharing Working Group* (Dec. 14, 2004) at p. 23.

[27] Interview with TTIC senior analyst (Oct. 19, 2004); Interview with TTIC senior official (Oct. 19, 2004); Interview with DIA (JITF-CT) analysts (Oct. 26, 2004); Interview with State Department (INR) analysts (Nov. 3, 2004); Interview with FBI (National Joint Terrorism Task Force) official (Nov. 5, 2004); Interview with CIA (DO) official (Nov. 8, 2004).

[28] Interview with TTIC senior official (Oct. 19, 2004); Interview with DIA (JITF-CT) analysts (Oct. 26, 2004). Between 2001 and 2003, the rate of use of originator controls on terrorism-related reporting across the Intelligence Community dropped by approximately 50 percent. Seventh Public Hearing of the National Commission on Terrorist Attacks Upon the United States (Jan. 26, 2004) (Statement of Russell E. Travers, TTIC Deputy CIO for Information Sharing).

[29] The rule of originator control, or ORCON, allows the agency that originates information to retain control over its dissemination and declassification (if it is classified) or its release to non-governmental parties. *See, e.g*., IC Inter-Agency ISWG May 2004 Calibration Report, NRO submission, Appendix B at p. B-37 (listing ORCON as a cultural barrier that "must…be addressed"); *id*., DIA submission, Appendix B at p. B-12 (citing FBI and NSA ORCON dissemination as constraining assembly of terrorism intelligence database).

[30] Interview with CIA (Collection Concepts Development Center) official (Oct. 7, 2004); Interview with FBI (WMD) officials (Oct. 13, 2004); Interview with emergency preparedness official of the Office of the Governor of Virginia (Nov. 10, 2004); Homeland Security Advisory Council, *Final Report: Intelligence and Information Sharing Initiative* (Dec. 2004).

[31] Markle Foundation Task Force on National Security in the Information Age, *Creating a Trusted Information Network for Homeland Security* (2003) at pp. 7-8. The Markle Foundation funds a variety of studies that analyze the potential of new technologies to address critical public sector needs, particularly in the areas of health and national security.

[32] Letter from Thomas J. Ridge, Secretary of Homeland Security; Robert S. Mueller, III,

Director Federal Bureau of Investigation; George J. Tenet, Director of Central Intelligence; and John O. Brennan, Director Terrorist Threat Integration Center; to The Honorable Susan M. Collins, Chairwoman Senate Committee on Governmental Affairs, and The Honorable Carl Levin, Ranking Member (Apr. 13, 2004) at p. 2.

[33] *Id*.

[34] Memorandum from John O. Brennan, TTIC Director, to Director of Central Intelligence (May 19, 2004) at pp. 2-4, 6-8.

[35] Memorandum from John O. Brennan, TTIC Director, to Director of Central Intelligence (June 23, 2004).

[36] *Id.*

[37] Memorandum from John E. McLaughlin, Deputy Director of Central Intelligence (July 2, 2004).

[38] Interviews with John O. Brennan, TTIC Director (Sept. 22, 2004 and Feb. 8, 2005).

[39] Interview with John O. Brennan, Interim Director of NCTC (March 15, 2005). The July 2 memorandum does not directly discuss the counterterrorism responsibilities of FBI, DHS or the Defense Department, which are mentioned briefly in Director Brennan's first memorandum.

[40] *Id*.

[41] Interview with Director of CTC (Nov. 5, 2004). Other CTC personnel expressed the same sentiment, using nearly identical language. Interview with senior CTC official (Oct. 22, 2004).

[42] IRTPA at § 1021 (adding section 119 to the National Security Act to establish the NCTC in law, provide its primary missions, and outline the reporting chain of its director).

[43] *Id*. at § 1021 (adding section 119(d) to the National Security Act to provide that one of the primary missions of the NCTC is to "serve as the primary organization in the United States Government for analyzing and integrating all intelligence…pertaining to terrorism").

[44] *See, e.g.*, Interview with TTIC senior official (Feb. 4, 2005).

[45] Interview with TTIC senior analyst (Oct. 19, 2004).

[46] Interview with TTIC senior official (Feb. 4, 2005).

[47] NCTC, CIA, FBI, DIA, NSA, and the Departments of State and Homeland Security comprise the so-called "Warn 7." *Id*.; Memorandum from John O. Brennan, TTIC Director, to Director of Central Intelligence (May 19, 2004) at ¶ 7.

[48] Letter from Thomas J. Ridge, Secretary of Homeland Security; Robert S. Mueller, III, Director Federal Bureau of Investigation; George J. Tenet, Director of Central Intelligence; and John O. Brennan, Director Terrorist Threat Integration Center; to The Honorable Susan M. Collins, Chairwoman, Senate Committee on Governmental Affairs, and The Honorable Carl Levin, Ranking Member (April 13, 2004) at p. 3; IRTPA at § 1021(f)(D).

[49] Interview with TTIC senior analyst (Oct. 19, 2004).

[50] Under IRTPA, NCTC serves not only as the governmental entity responsible for counterterrorism analysis and warning, but is also responsible for developing strategic operational plans for counterterrorism operations conducted by the U.S. government. It is our understanding that details regarding how NCTC will perform its strategic operational planning role have not fully been resolved. Accordingly, this report does not address NCTC's responsibility for this strategic planning function. IRTPA at § 1021.

[51] Interviews with CTC senior officials (Oct. 22, 2004 and Nov. 5, 2004).

[52] The law vests the NCTC with authority to "disseminate terrorism information, including current terrorism threat analysis," to senior policymakers, but does not grant it exclusive authority to do so. Moreover, the NCTC is given "primary responsibility within the United States Government for conducting net assessments of terrorist threats." But the law also states that nothing in its text "shall limit the authority of [other agencies] to conduct net assessments." IRTPA at §§ 1021(f)(1)(G), 1021(f)(2).

[53] Interview with FBI (Counterterrorism) official (Nov. 4, 2004).

[54] Interview with CTC official (Oct. 22, 2004); Interviews with TTIC senior analyst and TTIC (WMD) analysts (Oct. 19, 2004); Interview with DIA analysts and managers (Oct. 26, 2004); *see also* Interviews with former senior Intelligence Community officials (Sept. 28, 2004 and Oct. 15, 2004).

[55] Interview with TTIC senior analyst (Oct. 19, 2004).

[56] Interview with TTIC (WMD) analysts (Oct. 19, 2004).

[57] Interview with FBI (Counterterrorism) official (Nov. 4, 2004).

[58] CTC cited burnout as a critical retention problem. Interview with CTC (WMD) official (Oct. 22, 2004). DIA cited examples of analysts leaving to work fewer hours for higher salaries with contractors. Interview with DIA analysts and managers (Oct. 26, 2004).

[59] Interview with TTIC (WMD) analysts (Oct. 19, 2004).

[60] Interview with senior CTC official (Oct. 22, 2004).

[61] IRTPA at § 1021.

[62] Interview with FBI (WMD) officials (Oct. 14, 2004). *See also* Interview with former senior intelligence official (Oct. 15, 2004) (discussing Collection Concepts Development Center (CCDC) study on the active interdiction of weapons of mass destruction, which underscored that one of the main underlying problems was that no one owned the problem of WMD terrorism); Interview with CTC (WMD) official (Oct. 22, 2004) (suggesting dedicating a NSC policy staffer to the issue); Interview with FBI (Counterterrorism) official (Oct. 22, 2004) (noting how the pre-election threat is an example of how U.S. government lacks a national WMD terrorism strategy).

[63] Interview with FBI (WMD) officials (Oct. 14, 2004).

[64] Interview with TTIC senior analyst (Oct. 19, 2004).

[65] Interview with CTC (WMD) official (Oct. 22, 2004); Interview with FBI (WMD) officials (Oct. 14, 2004).

[66] Interview with FBI (WMD) officials (Oct. 14, 2004).

[67] *Id*.

[68] Interview with CTC (WMD) official (Oct. 22, 2004); Interview with FBI (National Joint Terrorism Task Force) official (Nov. 5, 2004).

[69] 9/11 Commission Report at p. 263.

[70] Even the two groups' jargon differs. Those working on state-based programs talk of "WMD;" while those working on terrorism programs talk of "CBRN" (i.e., chemical, biological, radiological, and nuclear devices).

[71] An example of positive coordination is provided in our classified report, but cannot be discussed in an unclassified format.

[72] Interview with FBI (WMD) officials (Dec. 2, 2004).

[73] *Id.*
[74] *See, e.g.*, Interview with CTC (WMD) official (Oct. 22, 2004).
[75] Interview with FBI (WMD) officials (Oct. 14, 2004).

# CHAPTER FIVE
# IRAN AND NORTH KOREA: MONITORING THE DEVELOPMENT OF NUCLEAR CAPABILITIES

The Commission carefully studied the Intelligence Community's capability to assess accurately the nuclear programs of Iran and North Korea. In doing so, we reviewed numerous intelligence reports and conducted interviews with Intelligence Community analysts, collectors, and supervisors, as well as policymakers and non-governmental regional and weapons experts. Because even the most general statements about the Intelligence Community's capabilities in this area are classified, the Commission's assessments and eleven specific findings cannot be discussed in this report. The Commission has, however, incorporated the lessons learned from its study of Iran and North Korea in all of our recommendations for reform of the Intelligence Community.