

# 1 REDUCING UNCERTAINTY

THE U.S. GOVERNMENT spends billions of dollars every year to reduce uncertainty. The National Weather Service spends more than \$1 billion a year to forecast precipitation amounts, track storms, and predict the weather.<sup>1</sup> The Centers for Disease Control spend more than \$6 billion to detect and investigate health problems in the United States and abroad.<sup>2</sup> The Departments of Agriculture and Energy track and predict production of crops and various types of energy.<sup>3</sup> Virtually every agency of the federal government monitors and forecasts a wide range of developments because farmers, manufacturers, state governments, travelers, and citizens in every walk of life want information that will enable them to make better-informed decisions about what to grow, whether to invest, and where to travel. In other words, we spend a lot of money to anticipate problems, identify opportunities, and avoid mistakes.

A substantial portion of what we spend to reduce uncertainty—almost \$50 billion a year—goes to the U.S. Intelligence Community (IC).<sup>4</sup> The need for this amount of money is justified through a process that emphasizes threats to our nation, our interests, and our people. For example, the classified and unclassified versions of the Annual Threat Assessment submitted to Congress by the director of national intelligence devote far more attention to problems and perils than to opportunities to shape events.<sup>5</sup> This emphasis is understandable, but it is also unfortunate because it obscures one of the most important functions of the Intelligence Community and causes both analysts and agencies to devote too little attention to potential opportunities to move developments in a more favorable direction.<sup>6</sup>

Intelligence Community work to reduce uncertainty differs from that of other U.S. government (USG) agencies in a number of important ways. The most obvious, of course, is that it has access to clandestinely acquired and other classified information. Indeed, the IC exists, in part, to ferret out secrets and to collect information that cannot be obtained by scholars, journalists, bankers, diplomats, or other “collectors.”<sup>7</sup> The use of classified information does not automatically make analyses produced by the Intelligence Community better than those produced using only unclassified information, but reducing uncertainty about a large number of traditional national security issues can be more precise and often more reliable if IC collectors have managed to intercept, inveigle, purchase, or steal information that others wish to keep hidden.

Another way in which IC efforts to reduce uncertainty differ from those of other USG agencies is that most IC products remain classified for a long time. The reasons they do include the need to protect sources and methods (that is, how we obtained the information), the value attached to objectivity and clarity (it can be difficult to obtain a hard-nosed assessment of a foreign political leader or military capability if the analysis is intended for public dissemination), and the fact that many IC assessments are used to determine policies and negotiating positions of the U.S. government (telling others what U.S. officials are considering before they have made a decision on the issue is generally thought to be unhelpful). Despite recurring assertions to the contrary, IC analytic products are not classified for long periods of time to prevent taxpayers from knowing what they get for \$50 billion a year. Classification decisions are made when assessments are produced, almost always on the basis of the classification level of information used in the report. I cannot imagine a situation in which an analyst or manager would say, in effect, “This analysis is really bad. Let’s disseminate it to decision makers but give it a very restrictive security classification so the public will not see how bad it is.” In my experience, most intelligence assessments are not very sexy or exciting, and few present theoretical breakthroughs of any kind. But that does not mean that they are poorly crafted or of little value. As noted in Chapter 5, hundreds of National Intelligence Estimates have been declassified and released. Most of them stand up pretty well, especially if judged against the criteria of “Were they useful to decision makers at the time they were produced?” and “Did they help to reduce uncertainty—even if only by reaffirming what officials thought they understood to be the case—about issues being deliberated in the USG?”

Reducing uncertainty sometimes involves acquiring information, overtly and covertly, that is thought to be useful to understanding developments or intentions. Sometimes it involves research and analysis to produce what Carl Ford refers to as “new knowledge,” that is, better understanding and new insights derived from thinking hard about information we possess but have not considered or combined in the way that led to the new assessment.<sup>8</sup> At still other times it involves efforts to substantiate or disconfirm a hunch articulated by a customer or fellow analyst or to refute statements made in a meeting or the media. Reducing uncertainty, in other words, can take many forms and involve many types of analysis, but it almost always strives to enhance understanding of what is known, what remains unknown, what is happening, where events seem to be headed, what is driving them, and what might alter the trajectory of developments.

Contrary to fictional depictions and popular misconceptions fueled by political grandstanding and media caricatures, the intelligence enterprise exists to do more than steal secrets and “connect the dots.” Ferreting out information that adversaries wish to hide and discovering (and disrupting) terrorist plots and other threats to our nation and our interests are important missions and, disparaging characterizations notwithstanding, we perform them very well—most of the time. We never have batted 1.000 and never will, but getting it mostly right, most of the time, in time to shape, prevent, or prepare for developments with the potential to affect our nation, our citizens, and our interests is and will remain our most important goal and criterion of success. Unlike highly paid ballplayers, we will never be satisfied with a .300 batting average. The security of our nation requires that we come as close to 1.000 as is humanly possible, and every IC analyst worthy of the title is determined to do so, both individually and collectively.<sup>9</sup>

For reasons of patriotism, professionalism, and personal pride, Intelligence Community analysts aspire to meet exceptionally high performance standards. High standards, and high expectations, are intrinsic to the profession because how well or badly analysts perform can have real-world consequences. As I have told thousands of new recruits, they must always be cognizant of the facts that U.S. government officials will be influenced as well as informed by what they say and write and that the efficacy of U.S. policies and actions will be determined, in part, by the analysis they produce. For those who serve in the U.S. Intelligence Community, the often-derisive phrase “good enough for government work” has a very different meaning than it does in conventional usage. In the Intelligence Community, “good enough for government work”

means not simply that it must be as accurate as possible but also that it specifies clearly what is and is not known about the issue, the quantity and quality of available information, what assumptions have been used to bridge intelligence gaps, what alternatives have been considered, and how much confidence analysts have in the evidence and their judgments.<sup>10</sup> It also requires addressing the right questions at the right time and ensuring that information and insights are delivered to all the right people.<sup>11</sup>

The first list of requirements summarized in the previous paragraph involves tradecraft issues. In most respects, the requisites for good intelligence analysis are identical to the requirements for good academic analysis and good analysis of all other kinds, and IC analysts can—and must—rely heavily on the analytic methods they learned in graduate school. There are differences between academe and the world of intelligence (for example, deliberate efforts to hide information and to deceive or mislead foreign governments are much more common in the work of the Intelligence Community than they are in academic research), but the differences should tip the balance in the direction of enforcing even higher standards for IC analysis than for peer-reviewed academic papers.<sup>12</sup> In other words, I have no sympathy for arguments that one must give IC analysts a break because they operate under conditions and constraints that generally are not found in university or think tank research settings. To the contrary, standards of performance for the Intelligence Community can be no lower and arguably must be higher than those in academe for the obvious reason that the potential impacts of IC analysis are far more consequential. An academic who does bad or sloppy work will be chastised by peers and perhaps denied tenure, but faulty intelligence analysis has the potential to redirect U.S. foreign or security policies, discredit or endorse the positions of foreign leaders or governments, raise doubts about the loyalty of citizens or corporate actors, or cause the United States to undertake unwarranted or counterproductive military actions.<sup>13</sup>

The second set of requirements previously noted—right questions, right time, and right people—is more germane to intelligence analysis than it is to academic research but has both similarities and analogs for certain types of think tank research and for consulting firms producing analysis for particular clients. There are important differences, but the IC, think tanks, and consultants all produce “targeted” assessments timed to inform—or influence—particular decisions. All three produce other types of analysis as well, but my focus here is on products that have been requested by a particular customer or are produced at the initiative of an analyst or manager who knows the issue

and the target audience well enough to judge that examining a particular question or set of questions at a particular point in time would be helpful to the targeted decision maker.<sup>14</sup>

The line between analysis produced to inform and analysis produced to influence can be very vague and may exist mainly in the eye of the beholder, and many argue that intelligence analysts must stay far back from that line lest they be guilty or suspected of policy advocacy.<sup>15</sup> I certainly agree that intelligence analysts must not be advocates for policy and that they must be—and be seen to be—as objective as possible. That, as well as having access to classified information that is not available to most analysts outside the Intelligence Community, is what distinguishes them from the many other individuals and organizations pushing information and ideas to U.S. policy makers.<sup>16</sup>

Intelligence analysis is exacting work, but the intellectual and psychic rewards can be substantial. The challenge of unraveling a mystery, solving a geopolitical puzzle, or discovering previously unknown or unappreciated dimensions of situations with the potential to affect the security of our nation and the efficacy of its policies requires rigor, dedication, and flashes of inspiration. For an analyst, the process itself is enjoyable; producing an assessment that enhances understanding and assists those we support is very gratifying. Nevertheless, most of the time analytic achievements earn mainly—or only—psychic rewards and commendation from peers and immediate supervisors. Pats on the head or “attaboys” from those we support are much rarer than they should be. That is unfortunate but probably inevitable because the nature of intelligence support makes it an iterative process in which continuous interchange between decision makers and analysts clarifies issues, integrates new information into preexisting intellectual frameworks, and produces more incremental increases in understanding than “eureka” moments of discovery. The analyst plays a critical role in this process by providing new information and new insights, but the payoff comes when the decision maker takes ownership of the new idea. Having made it their own, customers seldom want to share credit unless they still have only low confidence in the idea or insight. Intelligence analysts must remember that the goal is not to make themselves smarter but to make those whom they support more knowledgeable about the issues they are working on in the hope that policy makers will make better decisions. In my experience, customers are more likely to show their appreciation for analytic assistance by asking more questions and granting greater access to deliberative meetings than they are to give analysts credit for providing an insight that triggered or facilitated new policy recommendations.

Solving analytic puzzles is more difficult than providing valuable input to those we support. Much of the time, we can be useful without being brilliant. As Carl Ford regularly reminded our analysts when he was assistant secretary of state for intelligence and research, on any matter of importance there are probably dozens of things that policy makers think they should know about the issue. Of the dozens of things they think it important to understand, they think they know only a few and actually understand fewer than that. This creates an enormous opportunity for analysts to provide valuable input. If they can generate new information and/or new insight on just one or a few of the things policy makers would like to know, they have increased understanding and reduced uncertainty. They may also have given the customer they support a bureaucratic advantage because if he or she understands the issue better than others working the problem, or at least is able to convince them that he or she understands it better, the likelihood of gaining deference or support for that customer's preferred course of action goes up.

Policy makers appreciate it when analysts give them information and insight that they can use to advantage as well as to deepen their own understanding, and they often reward utility with greater confidence and better access. That is natural and helps analysts to become even better informed about the intelligence and analytic needs of those they support.<sup>17</sup> Such a relationship should not—must not—lead to situations in which analysts provide new information and insight only to their primary customer. Analysts need the confidence and trust of those they support if they are to do their jobs effectively, but an important part of their jobs is to ensure that the insights they produce are provided to “everyone” working the issue and, an even more difficult challenge, to all who might find them useful. This means sharing their insights with analyst counterparts who support other policy makers, publishing them in widely disseminated publications, posting them on appropriate websites, and writing them at a level of classification that makes them easily accessible to all who might find them useful.<sup>18</sup>

### **CONTINUITY AND CHANGE**

The purpose of intelligence since time immemorial has been to reduce uncertainty about the aspirations, intentions, capabilities, and actions of adversaries, political rivals, and, sometimes, partners and allies. What the recipients of intelligence support want to know about has changed greatly over the years, as have the means of collection, the pace of operations, and the amount of

information available. But IC customers still want to avoid surprise and to understand developments well enough and soon enough to avoid, alter, or ameliorate potentially adverse consequences for national security and other national interests. Other continuities include the insatiable demand of customers and analysts for “more and better” intelligence; the persistence of information gaps that must be bridged using assumptions, analogies, and alternative hypotheses; and the critical importance of experienced analysts and sound tradecraft. The primary purpose of this book is to describe some of the changes that have transformed the scope, content, and time lines of intelligence analysis during the past two decades and, more importantly, to enumerate and explicate enduring requisites for the production of accurate, insightful, and useful analytic judgments.

A second purpose is to describe what analysts do, how they do it, and how they are affected by the political context that shapes, uses, and sometimes abuses the fruits of their labors in the analytic vineyard. The book is written from the perspective of one who has seen the process from the bottom, the middle, and the top, both within and across the diverse components that constitute the U.S. Intelligence Community. I know that there are important differences in the missions, customers, expertise requirements, and career paths of analysts in each of the eighteen analytic components of the community and have argued strenuously that it is imperative to respect and preserve most such differences.<sup>19</sup> It is even more important to integrate the capabilities that exist in different components of the IC and to capture synergies latent in its structure. The discussion of analyst roles and responsibilities acknowledges these differences but focuses instead on commonalities to underscore the points that analysts have more in common than they sometimes believe to be the case and that the requisites of good analytic tradecraft are essentially the same no matter where one works.

The third purpose is to enumerate some of the lessons that I have learned as a participant observer who began my intelligence career as an Army linguist and military analyst in 1970, became a senior manager of intelligence analysts in 1989, and was given the opportunity to lead the analytic transformation effort mandated by the Intelligence Reform and Terrorism Prevention Act of 2004<sup>20</sup> when I was named deputy director of national intelligence for analysis and chairman of the National Intelligence Council in 2005.<sup>21</sup>

This is, in many respects, a personal tale. I have decided to write the book in this way because analysts working in the Community today and, probably,

for some time to come will be working within the parameters that I helped to establish during 2005–2008, and I believe it important to articulate why I did some of what I did during that period. The result is neither a personal nor an organizational history. It is spiced with anecdotes from my own career that helped shape my perception of what worked and what didn't, and it presents the approach to change that I employed when given the opportunity to lead the analytic community. This book recounts some of my thought process, the lessons I learned and attempted to apply, and some of the ways in which my decisions were influenced by the organizational and political environments in which I operated. For all of these reasons, the book is more analytic narrative than objective history. It makes no pretense to being a definitive account of change in the Intelligence Community or a comprehensive review of what has been written about the Intelligence Community by others. Indeed, most of the sources cited are intended to provide additional information or alternative views; inclusion does not necessarily signify endorsement, but the pieces cited may stimulate additional thoughts and challenges to what I have written or help to clarify points that receive only cursory treatment in this book.

### **EVOLVING AND ESCALATING EXPECTATIONS**

The origins and objectives of the modern U.S. Intelligence Community date to the immediate post–World War II era and were designed, in important respects, to preclude “another Pearl Harbor.”<sup>22</sup> For the most part, this required careful monitoring of the Soviet Union and its allies to guard against the possibility of a surprise attack by an alliance far more formidable than the Japanese empire was in 1941. We became very good at watching the Soviets, and they became very good at watching us. The purpose was clear, the focus was sharp, and there were no surprise attacks on the United States. After the Sino–Soviet split, the IC broadened its focus and became adept at monitoring multiple countries simultaneously. The key point I want to make here is that, for decades, the priority objective of the IC was to monitor threats from big nation-states.

That changed after September 11, 2001, when the focus for much of the work of the IC shifted from nation-states to nonstate actors, principally al Qaeda. It is much harder to monitor nonstate actors than it is to monitor the conventional and strategic forces of big countries. The criterion for IC success also shifted, from detecting plans or preparations for a military strike against the United States, its facilities, or its allies abroad to detecting plans and preparations for



an unconventional attack on landmark buildings or other nonmilitary targets inside and outside the U.S. homeland. The task of the IC became more difficult in proportion to the shift from detecting an attack that would presage nuclear war endangering millions of people and our way of life to one that might be an isolated event endangering thousands of Americans. For smaller groups with lesser capabilities, the challenge was even greater.<sup>23</sup>

The aftermath of the failed 2009 Christmas Day airline bombing indicated that expectations and demands for the Intelligence Community had escalated again. Now the criterion for success is detecting the plans and preparations of individual malefactors capable of killing hundreds of Americans by destroying a single airplane.<sup>24</sup> Similar narrowing of focus has occurred with respect to other objects of security concern and requirements for IC attention. For example, it is no longer adequate to be able to pinpoint the location of all nuclear-armed missiles; now the Intelligence Community is expected to be able to pinpoint the location of individual terrorists, individual improvised explosive devices (IEDs), and individual shipping containers. In other words, one determinant of the number of “dots” to be collected and connected has expanded from a handful of big countries to literally billions of individuals located in almost 200 nation-states. The attendant escalation of expectations and demands for precision requires more than shifting focus or adding a few analysts. Using a mathematical formula as simplistic as the “connect the dots” metaphor, even if nothing else had changed (which was not the case), the transition from a few countries to billions of individuals made the challenge roughly a billion times more difficult.

The demise of the Soviet Union and end of the Cold War changed the equation and expectations in many other ways as well. One was to broaden substantially the scope of issues subsumed under the rubric of national security to encompass concerns—many now defined as “threats”—as disparate as the effects of global climate change, infectious disease, cybersecurity, trafficking in persons, counterfeit pharmaceuticals, and international criminal networks. Every one of these “new” threats/challenges/IC responsibilities is both important and difficult to monitor on a global basis. Broadening the scope in this way brought a number of new “customers” into the mix, and they, in turn, further expanded the number of questions and issues in the Intelligence Community’s portfolio of responsibilities.

Broadening the scope of issues assigned to the Intelligence Community and increasing the number of customers and topics on which they wanted

“more information” coincided with dramatic advances in technical collection and data management capabilities. Defense contractors and other vendors seeking new markets for products and services to replace those no longer needed in Cold War quantities happily embraced the Intelligence Community as a priority customer and produced even more dramatic gains in the ability to collect, process, and manipulate digital data. Analysts were, of course, delighted to have more information and more ways to store and manipulate data, but many were reminded of the admonition to be careful about what you wish for because you might get it. After years of pleading for “more intelligence,” we got it—big time. Analysts are now awash in data, and there are literally billions of times more “dots” to be examined, evaluated, assessed, and integrated into analytical products. Those who speak glibly about “connecting the dots” seemingly have no idea how immense and difficult it is to perform what they often describe as a task so simple that children can do it.

Collecting information is a necessary but not sufficient condition for understanding our rapidly changing and increasingly interconnected world, and terabytes of data alone do not reveal event trajectories, what is driving them, where they are headed, what might derail or deflect them, or how they will interact with developments originating thousands of miles away. Making sense of the data and distilling insights helpful to decision makers are the responsibility of analysts. Stated another way, the role of analysts is to convert data into insight. We embrace this responsibility because it contributes to the safety, security, and success of our country. That is why intelligence analysts are paid to do what we do, and it is a very strong motivating factor. But it is not the only reason intelligence analysts work as hard as they do to unravel mysteries, solve puzzles, and discover new insights. In addition to patriotism and professionalism, most intelligence analysts I have encountered through the years are also motivated by the intellectual challenge and psychic rewards inherent in the job.

This is probably a good point in the narrative to make clear that the foregoing discussion of escalating demands and expectations should not be read as a complaint or lamentation.<sup>25</sup> At one level, it is simply descriptive. As a former colleague used to say, “It is what it is.” Describing these dimensions of change is not intended to evoke sympathy for the plight of overworked and underappreciated analysts or simply to decry demeaning characterizations of what it is that intelligence analysts are supposed to do (that is, connect the dots). What it is intended to do is provide a succinct explanation of why working harder,

adding more analysts, and simply tweaking time-tested IC practices would be woefully—and dangerously—inadequate to meet current and foreseeable requirements for intelligence support. To meet demands and expectations, the Intelligence Community must be transformed. This is, in important respects, a book about transformation. More specifically, it attempts to describe how I thought about the transformation of analysis that I was entrusted to lead. Each of the other chapters uses anecdotes and illustrations to indicate how I saw and experienced changing circumstances and lessons that I learned and applied while serving in the Bureau of Intelligence and Research (INR) and as deputy director of national intelligence for analysis. My reason for writing it this way is to describe what it is like to be an intelligence analyst and to explicate my own thinking on issues germane to reform in the hope that doing so will stimulate others to do the same and continue the transformation that was begun on my watch.

#### **ORGANIZATION OF THE BOOK**

This is a book about the roles and responsibilities of analysts in the U.S. Intelligence Community. As such, it says very little about collection, covert action, post-9/11 efforts to reduce barriers between foreign intelligence and domestic law enforcement, the creation of the Office of the Director of National Intelligence, efforts to transform the IC from a collection of feudal baronies into an integrated intelligence enterprise, or other important dimensions of intelligence reform. Nor does it focus explicitly or extensively on the collection of measures I supervised to build a community of analysts and thoroughly transform the way analysts collaborate, gain access to information, interact with persons outside the Intelligence Community, or broaden and deepen their expertise, as well as many other dimensions of the transformation agenda.<sup>26</sup>

The overarching objective of the book is to provide a sense of the constraints, challenges, and opportunities that Intelligence Community analysts confront at various stages of their careers. It does not present a “typical” career trajectory or enumerate requisites or formulas for success, mainly because there is no “typical” career trajectory, and describing patterns from the past is almost certain to be misleading with respect to the future. Indeed, because a central theme of the book is that we are doing and must do many things differently than in the past, it would be counterproductive to suggest that career choices and trajectories appropriate to a different time and different circumstances provide a useful guide for success under very different conditions.

The whole point is that old patterns are no longer adequate and that analysts must contribute to the transformation of almost everything associated with our profession.<sup>27</sup> Transformation must be achieved through a combination of evolution from the top and revolution from the bottom. This book is intended to stimulate creative thinking and innovation from analysts at all grade levels and in all agencies. It is also intended to increase public understanding of what IC analysts do and to elicit more relevant and constructive suggestions for improvement from outside the Intelligence Community.

Although the book does not offer a typical career trajectory, it does provide a series of anecdotes and examples to illustrate the kinds of challenges and opportunities that I experienced during the nearly four decades that I was a working analyst and a senior manager of analysts. My career was not typical, but the issues, pressures, and opportunities that I experienced are not at all unique, and the lessons I learned from the customers I supported and the colleagues on whom I had to depend, especially after my portfolio expanded to include “all countries and all issues,” have broad applicability. One of the most important of such lessons was that I had no option except to rely on the work and judgments of my colleagues and subordinates. There simply was no time—and I did not have the requisite expertise—to review the intelligence used in more than a tiny subset of the roughly 14,000 analytic reports that I approved during eleven years in the INR front office and four years as chairman of the National Intelligence Council (NIC). I could review the tradecraft, but I could not check the homework. I had to trust the people who had done the work. Some proved to be more worthy of that trust than others, and one of my objectives in leading analytic transformation was to ensure that all analysts in all agencies were sufficiently well trained and well supervised that customers and colleagues could assume that all analysts employed good analytic tradecraft.

Each of the remaining chapters focuses on a different dimension of analytic work in the Intelligence Community. Chapter 2 examines some of the ways movies and other fiction have exaggerated and mischaracterized Intelligence Community capabilities, both to set the record straight and, more importantly, to make the point that public expectations about our ability to track individuals anywhere on the globe all the time have been skewed by media depictions of remarkable capabilities. Our “failures” to find Osama bin Laden or to know Iranian intentions are inexplicable and inexcusable in direct proportion to the extent to which the public thinks we are as good as Hollywood pre-

tends that we are. Similarly, fictionalized versions of what we do and how we do it make it difficult for ordinary citizens to appreciate the magnitude of the challenges that result from increasing the range and number of intelligence customers, the scope of issues subsumed under the heading of “national security concerns,” the amount and variety of expertise required to understand complex issues, and the precision required to make intelligence judgments “operational.” Most of Chapter 2 focuses on the escalation of requirements and the challenges of coping with vastly more information in ever-shorter periods of time.

Chapter 3 focuses on the responsibility of analysts to convert data into insight and what is required to provide useful input to decision makers. Intelligence analysis involves more than just answering hard questions and solving puzzles when most of the pieces are missing. It also involves much more than connecting the dots. Unlike academic researchers who generally select what to study based on questions that interest them, have only loose or nonexistent deadlines, and take great pride in producing knowledge for knowledge’s sake, IC analysts have an obligation (as well as an opportunity) to deepen understanding of issues affecting U.S. national interests and the safety of our citizens. Most of the time, their research agendas are driven by customer requirements (both formal requests and those requirements intuited by analysts who understand the issues and the policy concerns well enough to recognize when customers “need” information or insights that have not been requested) and decision time lines. Analysts seldom have time to research a problem thoroughly or to “get it completely right,” but they always have an obligation to provide input germane to the issue in time to be useful. An analyst who figures it out after it is too late to inform debate and decisions has failed to be useful. This chapter is mostly about ways to be useful.

Chapter 4 addresses the perennial tension between current intelligence and strategic analysis with a primary focus on using analysis to anticipate and shape the future. The chapter also looks at why IC analysts pay more attention to threats than to opportunities and to warning about the possibility of bad things to the neglect of providing input that might help customers to increase the likelihood of positive developments. Strategic warning analysis is illustrated with examples from the NIC’s 2008 study, *Global Trends 2025: A Transformed World*; the 2008 National Intelligence Assessment on the geopolitical effects of global climate change; and the 2007 National Intelligence Estimate, *Iran’s Nuclear Intentions and Capabilities*. The first two case studies

focus on the processes used to produce assessments and the political environment in which they were produced. This chapter also introduces the importance of identifying trends, what drives them, where they are headed, and what they might portend for U.S. interests. Each of these factors is examined at greater length in Chapter 5.

Chapter 5 focuses on estimative analysis, particularly National Intelligence Estimates—what they are, what it means to say that they represent the “most authoritative judgments of the Intelligence Community,” why and how they are important, and why they have such high political salience and symbolic importance. The chapter also addresses other types of estimative analysis to underscore the apparently nonobvious point that preparing an estimate is what one does in the absence of data needed to make an exact calculation or assessment. Intelligence analysis almost always involves working on problems that are important, either intrinsically or because U.S. policy makers have defined them as important, and on which key data are missing. The more data are missing, the more dependent policy makers are on the assessments of IC analysts. This means, *inter alia*, that almost by definition—and most of the time—IC analysts must use assumptions, analogies, or alternative hypotheses to bridge information gaps. It also means that, most of the time, they will make errors and fail to pinpoint exactly what has transpired. Accuracy is desirable, but providing useful input that helps decision makers to deal with uncertainty is more valuable. Few estimates contain theoretical breakthroughs or reach surprising conclusions, but that does not necessarily detract from their utility at the time they were produced. Hundreds of declassified estimates have been released. Most of them were mostly correct.

The penultimate chapter, titled “A Tale of Two Estimates,” narrows the focus from estimative intelligence in general to just the flawed 2002 NIE on Iraq’s weapons of mass destruction and the controversial 2007 estimate on Iran’s nuclear intentions and capabilities. Its central purpose is to describe factual and process errors in the production of the Iraq weapons of mass destruction (WMD) estimate, the lessons I learned from that experience, and how those lessons were translated into procedural guidance that shaped the Iran nuclear NIE. The chapter also examines how flaws in the Iraq WMD estimate influenced the intelligence reform legislation that created the Office of the Director of National Intelligence and mandated specific steps to improve analytic tradecraft. This is also the most politically focused chapter in the book in that it describes my interactions with members of Congress who

took unprecedented interest in the Iran nuclear NIE as well as on my expectations for the way in which the Iran NIE would be scrutinized to determine how well the IC had learned the desired lessons from critiques of the Iraq WMD estimate.

### **ADDITIONAL BACKGROUND**

Although, or because, this book does not examine in detail the objectives, logic, or specific measures of the approach to analytic transformation that shaped and were shaped by the topics and developments discussed in this volume, a brief summary of what I was attempting to do will help to put what follows into broader context. My rationale for not adding chapters on analytic transformation to this book is that I could not figure out how to do so without either losing the internal logic and focus of the book or producing something that looked like two different books held together by one cover. Nevertheless, I believe the short summary that follows provides a useful characterization of the what, why, and how dimensions of my approach to analytic transformation and makes it easier to understand why I have focused as I have on the topics discussed in each of the subsequent chapters.

The Intelligence Reform and Terrorist Prevention Act of 2004 mandated and facilitated the most extensive reform of the Intelligence Community since its creation in 1947.<sup>28</sup> As is often the case, members of Congress and many others seemed to argue that passing legislation had fixed the many deficiencies identified by the 9/11 Commission, the Senate Select Committee on Intelligence, and the WMD Commission.<sup>29</sup> President George W. Bush subsequently mandated many recommended measures that were not addressed in the legislation.<sup>30</sup> Together, these documents prescribed dozens of measures to improve analysis. I knew that I had to address all of them and that many were inextricably linked, but I also knew that they were not equally important, especially in terms of their political salience and that I could not possibly gain support for—or cooperation on—attempts to address all of them at the same time. To make the task more manageable, I adopted the approach summarized in the following paragraphs.

Rather than spend a lot of time trying to devise a comprehensive plan for analytic transformation, I decided to develop the plan iteratively by beginning with tasks that I knew had to be addressed and for which I knew I had considerable support among top managers of analysis across the Community. The decision to build the plan as we went along was motivated by the realization

that I was unlikely to get it right the first time anyway, so there was no point in trying to devise a perfect plan before addressing problems that needed urgent attention, and by the judgment on my part that, if I put out a plan with any specificity, I would end up spending time and effort debating and defending the plan at the expense of discovering what worked, what didn't work, and what changes were needed to keep the process moving in the right direction. In short, my grand plan was to start small, fail cheap, fix problems as they arose, and build support by making managers across the IC active participants in the process. It became "our approach," rather than "my approach."

I decided early on that my highest priority had to be restoring confidence in the quality of our analytic work and the analysts who produced it. This was a nontrivial challenge because criticism of IC incompetence had been so sweeping and so damning that many customers who had no exposure to or experience with the Iraq WMD estimate began to wonder if the analysis they were receiving was any better, and many analysts lost confidence in their colleagues, their own agencies, and the Community as a whole. Unless we addressed this problem quickly, the IC—which in this case meant primarily analysts—would lose the confidence of and access to the policy customers they supported. Moreover, with the imminent departure through retirement of baby boomer senior analysts and the intake of large numbers of new analysts, we faced a possible staffing crisis if veterans decided to leave earlier and newly hired analysts decided that they did not want to work in an incompetent organization. A third dimension of this challenge was to build confidence in the quality of work done by colleagues in other components of the IC so that we could devise sensible divisions of labor, increase our analytic capabilities through collaboration across institutional boundaries, and reduce the amount of duplicative effort in order to assign more people to new problems.

Among the steps I took to restore confidence was to focus on early and visible improvement of the two flagship analytic products, the President's Daily Brief (PDB) and National Intelligence Estimates (NIEs). Director of National Intelligence John Negroponte had delegated responsibility for both to me, so I had the authority to mandate changes without having to go through cumbersome procedures needed to produce Intelligence Community directives and similar policy guidance.<sup>31</sup> Because it was the flawed Iraq WMD estimate that had triggered the campaign to improve analysis, I knew that estimates would receive especially close scrutiny, at least for a while, and that if we failed to



demonstrate improvement there, we would be assumed to have failed elsewhere as well. Conversely, if we demonstrated improvement in National Intelligence Council products, we would be assumed to be making comparable progress elsewhere. The situation was similar with respect to the PDB. Very few senior officials saw the PDB, but they were the most important officials in the USG, and at least some of them had lost confidence in the Intelligence Community. If we did not regain their confidence quickly, we would become a hugely expensive irrelevance.

Using the PDB and NIC products as primary vehicles for demonstrating improvement also facilitated my plans to improve overall IC analytic performance by improving the performance of each of the analytic components of the community and to do that, in part, by improving the performance of analysts in each of the agencies. The adoption of common analytic tradecraft standards across the IC and training analysts to meet those standards were logical next steps. The enormous intake of new analysts that occurred after 9/11 created an imperative and an opportunity to ensure that all were trained to the new standards. This also created an opportunity for joint training, that is, training analysts from across the IC in the same classes to mitigate organizational cultural biases and build confidence among analysts based on knowing that counterparts in other agencies had received the same training.<sup>32</sup>

The final element of the strategy that I want to note here is the development of new norms of and mechanisms for collaboration across agency boundaries. The model for this was the “Korea Team” in INR. It was comprised of analysts from five offices scattered across three floors of the State Department who interacted primarily via email. In other words, they were a virtual team with members separated by space and bureaucratic divisions. Because electrons can move between buildings and cities as easily as between floors of the same building, we had a model for virtual collaboration. To facilitate virtual teams and collaboration at a distance, we had to change security restrictions impeding the sharing of information among agencies and to introduce capabilities better than email. I used collaboration on PDB drafts, which now had to be coordinated among agencies rather than merely within the CIA, as a forcing function; if the system was sufficiently secure to transmit the PDB, it was secure enough for other products. Subsequently we introduced Intellipedia, a classified version of Wikipedia, and, later, A-Space. Analysts took to the new collaborative tools very rapidly, perhaps owing in part to the large percentage of young analysts accustomed to collaborating at a distance.

There are many other components of analytic transformation, but the point I will end with here is that we had a fortunate convergence of opportunity, necessity, urgency, and enthusiasm that enabled us to gain traction and build momentum. There is still a long way to go, and many of the hardest problems have yet to be solved, but there is still widespread enthusiasm on the part of analysts and eager determination to provide the best possible analytic support to those who make decisions affecting the safety and security of our country.