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# The Future of Intelligence Analysis, Volume 2: Annotated Bibliography: Publications on Intelligence Analysis and Reform

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# The Future of Intelligence Analysis
# Volume II
# Annotated Bibliography: Publications on Intelligence Analysis and Reform

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**Annotated Bibliography:**
**Publications on Intelligence Analysis and Reform**

**Ackerman, Robert K. (2003, October). "Intelligence: Horizontal Integration Challenges Intelligence Planner."** ***Signal,*** **29.**

The U.S. intelligence community is in a race against international adversaries, and to win, it must link diverse data systems and information processes so that experts can learn enemy intentions and plans before disaster strikes. This race toward horizontal integration of intelligence has a two-pronged thrust that encompasses both data exchange at the collection level and information exchange at various levels of command and civil government decision-making (Ackerman).

**Agrell, Wilhelm. (2002). "When everything is intelligence – nothing is intelligence."** ***Sherman Kent Center for Intelligence Analysis, Occasional Papers,*** **1(4).**

Today, many intelligence analysts not only have an academic background, but also some kind of academic education or training in their specific field. No one thinks it is a weird thing to give courses in intelligence and it's applications in various fields. The limiting factor is hardly reluctance to attend courses but the availability of appropriate and sufficiently qualified lecturers, courses, or training programs. If a modern profession is characterized by the transformation from improvisation and master-apprentice relations to formalized education and training programs, then intelligence analysis has come a long way.

**Aldrich, Richard J. (2003). "Intelligence Test."** ***Foreign Policy,*** **134: p. 98.**

Focuses on an article by Carmen A. Medina in 'Studies in Intelligence,' which asks whether the U.S. Central Intelligence Agency's (CIA) model of intelligence analysis is failing. Argument for a revolutionary overhaul; Implications of the growing availability of so-called open-source intelligence; Challenges to the CIA's Directorate of Intelligence (DI); Response to the article by DI officer Steven R. Ward; The slow pace of changes in U.S. intelligence.

**Andre, Louis E. (1997). "Intelligence Production: Towards a Knowledge-Based Future."** ***Defense Intelligence Journal,*** **6(2): 33-45.**

To be prepared to participate in the ongoing information revolution, the intelligence production community needs to make a "concerted effort to find dramatically better ways to capture and distribute digitally the extraordinary and dynamic base of knowledge resident in our analytic corps." (Abstract from http://intellit.muskingum.edu/alpha_folder/D_folder/defij_analysis.html)

**Armstrong, Fulton T. (2002). "Ways to Make Analysis Relevant But Not Prescriptive."** ***Studies in Intelligence, Unclassified Edition,*** **46(3): 37-43.**

In confronting the intelligence/policy divide that analysts are expected to observe, this author describes the conundrums that intelligence professionals face as they attempt to provide analyses that are policy neutral yet attuned to policymaker interests. To better navigate these choppy waters, the author finds solutions in commitment to rigorous standards of alternative-analysis and avoidance of value judgments while simultaneously consulting outside sources to stay in touch with the Beltway agenda.

**Barger, Deborah. (2005)."Toward a Revolution in Intelligence Affairs."** ***Rand Corporation,***
**Technical Report. Retrieved from**
**http://www.rand.org/pubs/technical_reports/2005/RAND_TR242.pdf**

As the global war on terrorism continues to expand and the post-Cold War security environment remains in flux, both the strengths and weaknesses of U.S. intelligence have been thrust into the public spotlight. The author advances the argument that a "Revolution in Intelligence Affairs" is needed to prepare the Intelligence Community to meet its future challenges. In this report, she presents a framework for how the United States should consider specific changes to its intelligence enterprise to improve its effectiveness.

**Barger, Deborah. (2004). "It is Time to Transform, Not Reform, U.S. Intelligence."** ***SAIS Review,*** **24(1).**

Intelligence reform has traditionally been the purview of those outside of the Intelligence Community. Many insiders would argue that intelligence reform efforts have resulted in more regulation and bureaucracy and little, if any, improvement in intelligence performance. To address the challenges that the United States will face in the future, it needs to look forward to transforming intelligence, not backwards at reforming it. The transformation of intelligence, however, will require a three-way partnership among external catalysts who bring new ideas to the table, legislative overseers who support new ideas through funding and legislation, and internal supporters who evaluate and then implement change (Barger).

**Berkowitz, Bruce. (1996). "Information Age Intelligence."** ***Foreign Policy,*** **103: p. 135.**

Comments on the need to reform intelligence services in the United States. Role of information technology advances in the need to reform intelligence services; Areas needing changes to improve service efficiency; Urgency for the intelligence community to assume the flexibility of corporations to changes.

**Berkowitz, Bruce D. (1997). "Information Technology and Intelligence Reform."** ***Orbis,*** **41(1): 12-14.**

Many issues of intelligence reform primarily concern technology – in particular, information technology. The intelligence community has become more dependent on technical systems for collecting, processing, and disseminating its intelligence. At the same time, rapid improvements in technology are changing both the nature of information systems and how people use them. It follows that any intelligence reform must include plans for the effective development, management, and organization of technology. As the U.S. intelligence community prepares for the post-cold war era and the twenty-first century, Americans have the opportunity to rethink what they expect from intelligence and how they expect it to operate. The one certainty is that technology will be central to any proposed reform, as the intelligence community, like the rest of society, moves into the Information Age (Berkowitz).

**Berkowitz, Bruce. (2001). "Better Ways to Fix Intelligence,"** ***Orbis,*** **45(4): 609-619.**

Despite the apparent consensus on the need for change, recent intelligence failures suggest that U.S. intelligence has yet to leave its Cold War-era methods and structure behind. All of this raises the questions of why it has been so hard to modernize American intelligence and what practical steps could ensure that needed reforms finally take hold.

The challenge of intelligence reform is not how to make the intelligence bureaucracy work better, but rather how to make the intelligence community operate less like a bureaucracy. The measures required to achieve this bear little resemblance to traditional intelligence reforms. Improving communications capacity, or bandwidth, is crucial to countering the data glut intelligence analysts face. The situation is only likely to get worse in the face of increasing interaction among producers and users of intelligence, the sharing of ever-larger data sets, and an expanding base of users and information sources. Communication links will themselves become a major constraint on change within the intelligence community. Investments in communications capacity may seem more like a logistical detail than a major policy reform, but they are utterly essential to improving intelligence operations (Berkowitz).

**Berkowitz, Bruce. (2003). "Failing to Keep Up With the Information Revolution."** ***Studies in Intelligence,*** **47(1).**

[The author] was a Scholar-in-Residence at the Sherman Kent Center for Intelligence Analysis, and was charged with looking at how the Directorate of Intelligence (DI) uses information technology (IT), and how it might use this technology more effectively.

DI analysts are easily a match for their counterparts elsewhere in the government or private sector in terms of knowledge and analytic skill. [However], DI analysts know far less about new information technology and services than do their counterparts in the private sector and other government organizations. Many analysts seem unaware of data that are available on the Internet and from other non-CIA sources. Also, organizational, security, and technical obstacles keep DI analysts from easily communicating with other agencies. Technology is no substitute for smart analysts, of course, but better technology—and better use of technology—could improve the DI's efficiency and enable its analysts to be more responsive.

Being able to redeploy analysts and form *ad hoc* teams quickly and effectively is a basic requirement for intelligence organizations today. The DI needs to be more agile, and technology is part of the solution. The DI must use information technology more effectively if it hopes to provide US officials the intelligence that they require to detect, understand, and respond to current, emerging, and future threats facing the United States. To meet this challenge, however, the DI must adjust its culture and make major changes in its current approach to information technology operations (Berkowitz).

**Berkowitz, Bruce. (2004). "Intelligence for the Homeland."** ***SAIS Review*** **24(1).**

Two years after the September 11th attacks on America, a significant gap remains in our defenses against terrorists and other forms of foreign attack. The problem is that we still lack adequate homeland intelligence. As a result, we are still ill prepared to detect, analyze, and monitor foreign threats inside our borders (SAIS Review).

**Berkowitz, Bruce. (2004, February 1). "We Collected A Little, and Assumed a Lot."** ***Washington Post,*** **p. B01.**

Last week David Kay went to Capitol Hill to explain to lawmakers what he had found in Iraq. Until last month, Kay, a widely respected proliferation expert, headed the Iraqi Survey Group, the team assigned after the war to find Iraq's nuclear, chemical and biological weapons -- and assess how well U.S. intelligence understood the threat.

"It turns out we were all wrong, probably, in my judgment," Kay said at the hearing. "And that is most disturbing."

Disturbing is right. What happened? U.S. intelligence analysts have been taking a lot of criticism lately, but I believe that, when all the investigations are completed, we will discover that this wasn't an intelligence analysis failure. It was mainly an intelligence collection failure, combined with a misunderstanding all around about how intelligence really works.

**Berkowitz, Bruce and Allan Goodman. (2000). *Best Truth: Intelligence in the Information Age.* New Haven, CT: Yale Univ. Press.**

One would expect the best-funded intelligence service in the world to produce good results, but, unfortunately, the U.S. intelligence community continues to commit avoidable blunders. Intended as a provocative manifesto, this book calls for fundamental changes in the way that intelligence is collected, processed, and distributed by the U.S. government. Selected case studies are presented to illustrate problems and possible improvements. The authors call for more openness, a less hierarchical structure, and better cooperation with the private sector. Continually evolving technological challenges will probably be overcome since this is what Americans do best, but it is hard to change a large bureaucracy with an entrenched worship of secrecy, unless it receives a giant, costly shock (e.g., the bombing of Pearl Harbor). The authors, who both started their careers at the CIA, previously collaborated on Strategic Intelligence for American National Security.

**Best, Richard. (2003). "Intelligence Issues for Congress." Congressional Research Service, *CRS Issue Brief for Congress,* August 2003.**

The U.S. Intelligence Community continues to adjust to the 21st century environment. Congressional and executive branch initiatives have emphasized improved cooperation among the different agencies that comprise the Community by giving greater coordination and managerial authority to the Director of Central Intelligence (DCI). Priority continues to be placed on intelligence support to military operations and on involvement in efforts to combat transnational threats, especially international terrorism. Growing concerns about transnational threats are leading to increasingly close cooperation between intelligence and law enforcement agencies. This relationship is complicated, however, by differing roles and missions as well as different statutory charters.

The September 11, 2001 terrorist attacks, for which no specific warning was provided, have led to increased emphasis on human intelligence, statutory changes permitting closer cooperation between law enforcement and intelligence agencies, and to consideration of organizational changes to the Intelligence Community. Intelligence Community leadership and congressional committees have expressed determination to enhance analytical capabilities. A major concern is an imbalance between resources devoted to collection and those allocated to analysis, with collected data much exceeding analytical capabilities (Best).

**Best, Richard. (2005). "The Director of National Intelligence and Intelligence Analysis." Congressional Research Service, *CRS Issue Brief for Congress,* February 2005).**

The 9/11 Commission made a number of recommendations to improve the quality of intelligence analysis. A key recommendation was the establishment of a

Director of National Intelligence (DNI) position to manage the national intelligence effort and serve as the principal intelligence adviser to the President — along with a separate director of the Central Intelligence Agency. Subsequently, the Intelligence Reform and Terrorism Prevention Act of 2004, P.L. 108-458, made the DNI the principal adviser to the President on intelligence and made the DNI responsible for coordinating communitywide intelligence estimates. Some observers note that separating the DNI from the analytical offices may complicate the overall analytical effort.

**Betts, Richard. (2002). "Fixing Intelligence."** ***Foreign Affairs,*** **81(1): 43-60.**

A lot will be done to shore up U.S. intelligence collection and analysis. Reforms that should have been made long ago will now go through. New ideas will get more attention and good ones will be adopted more readily than in normal times. There is no shortage of proposals and initiatives to shake the system up. There is, however, a shortage of perspective on the limitations that we can expect from improved performance. Some of the changes will substitute new problems for old ones. The only thing worse than business as usual would be naive assumptions about what reform can accomplish.

The intelligence community has worked much better than [critics] assume. U.S. intelligence and associated services have generally done very well at protecting the country. [However], even the best intelligence systems will have big failures. It will be some time before the real story of the September 11 intelligence failure is known. At this point it is more appropriate to focus on the merits of proposals for reform and the larger question about what intelligence agencies can reasonably be expected to accomplish.

Reforms that can be undertaken now will make the intelligence community a little better. Making it much better, however, will ultimately require revising educational norms and restoring the prestige of public service. Even if achieved, such fundamental reform would not bear fruit until far in the future. Better intelligence may give us several more big successes like those of the 1990s, but even a .900 average will eventually yield another big failure. That means that equal emphasis must go to measures for civil defense, medical readiness, and "consequence management," in order to blunt the effects of the attacks that do manage to get through. Efforts at prevention and preparation for their failure must go hand in hand (Betts).

**Betts, Richard K. (2004). "The New Politics of Intelligence: Will Reforms Work This Time?"** ***Foreign Affairs*** **83(3): 2-9.**

The failure to prevent the attacks of September 11, 2001, the failure to find weapons of mass destruction in Iraq, and the proliferation of official investigations trying to figure out what went wrong in both cases have combined to put intelligence issues in a very unusual position this year: at the center of a

closely contested presidential campaign. All the attention creates both an opportunity and a danger. The opportunity stems from the consensus that major reforms are necessary. The danger stems from the gap between the urge to do something and the uncertainty about just what that something should be – as well as from the entanglement of intelligence and policy issues involved with the Iraq question in particular.

At the end of the day, the strongest defense against intelligence mistakes will come less from any structural or procedural tweak than from the good sense, good character, and good mental habits of senior government officials (Betts).

**Bodnar, John W. (2003).** ***Warning Analysis for the Information Age: Rethinking the Intelligence Process.*** **Washington, DC: Joint Military Intelligence College, Center for Strategic Intelligence Research.**

Changes in technology in the past half century have destroyed the ability to provide warning intelligence by traditional means. The changing tempo of the WMD and terrorist threats has virtually destroyed the ability to provide tactical or strategic warning.

New methodologies for warning intelligence can be developed based on quantum thinking rather than Newtonian thinking. Revolutions in Military Affairs (RMAs) are precipitated by new developments in technology that ultimately change not only strategies and operations but organizations as well. Our current strategies and organizations are based on Industrial Age technologies built by Newtonian thinking. Strategies and organizations for the Information Age must be built on quantum thinking.

This analysis also points toward the basis of a New Science based on quantum methods, which assume that the world is digital and multi-state. Data can be "massive" both in quantity and type. A major problem in exploiting the massive quantities available to the Intelligence Community is the lack of a historical baseline and a lack of librarians and curators to organize and tag the data for easy retrieval. This means that we must develop methods for rapid writing of classified history and for systematic data archiving. Collecting and analyzing massive amounts of data will not provide valid assessments unless the dimensionality of the data reflects the dimensionality of the problem. We need to analyze changes required in organizational structures to go from Industrial Age organizations for the Cold War to Information Age organizations needed to combat WMD and terrorism proliferation networks (Bodnar).

**Callum, Robert. (2001). "The Case for Cultural Diversity in the Intelligence Community."** ***International Journal of Intelligence and Counterintelligence,*** **14(1): 25-48.**

Historically, the U.S. Intelligence Community has been a homogeneous

environment bereft of participation from different races and cultures. While the IC has made strides in recent years, the community is still overwhelmingly white and disproportionately male. This cultural homogeneity leads to predictable and preventable errors in analysis. These errors commonly fall under the rubric of ``mirror-imaging'': the fallacy that antagonists will think and act as ``we'' would if ``we'' were in their shoes. Arguably, greater diversity will lead to improvements in analysis by lessening the impact of shared, common biases. An analogy comes from the world of business, which has become increasingly diverse in response to the inherent unpredictability of international markets.

**Clark, Richard M. (2003). *Intelligence Analysis: A Target-Centric Approach*. Washington, DC: Congressional Quarterly Press.**

Designed to give analysts and practitioners state-of-the-art, practical information and skills, *Intelligence Analysis* guides readers through the art of target modeling and organizational analysis, as well as quantitative and predictive techniques. Intelligence collectors, consumers, and analysts can and should work together to create and share a conceptual model of the intelligence target. Simply put, it's a smarter, more sensible way to collect, synthesize, and utilize intelligence. The author makes extensive use of real-world examples and cases and employs nearly 100 graphic elements to illustrate the versatility and effectiveness of his methodology.

**Coffman, Thayne, Seth Greenblatt, and Sherry Marcus. (2004). "Graph-based Technologies for Intelligence Analyst." *Communications of the ACM*, 47(3): 45-47.**

For the past 20 years, the intelligence community's focus was on improving intelligence collection at the cost of improving intelligence analysis. The problem today is often not a lack of information, but instead, information overload. Analysts lack tools to locate the relatively few bits of relevant information and tools to support reasoning over that information.

Subgraph isomorphism and statistical classification via social network analysis (SNA) metrics are two important classes of techniques that operate on attributed relational graphs, a representation familiar to the intelligence problems: finding significant combinations of events in a deluge of information (Coffman, Greenblatt, and Marcus).

**Dalby, Simon. (1995). "Security, Intelligence, the National Interest and the Global Environment." *Intelligence and National Security*, 10(3): 175-197.**

The global environmental situation is obviously a matter of concern. Stratospheric ozone holes, global climate change, sea level changes, fish stock depletions, desertification, population change, deforestation, and many other

issues clearly affect the national interests of many states. This important cluster of issues is now often described under the rubric of 'environmental security'.

In exploring this dilemma of environmental security, this essay first surveys some of the large scale contemporary environmental challenges. It then discusses the effects of environmental changes on international security. It suggests that the Cold War assumptions are inappropriate to dealing with most environmental security issues. The implications of rethinking security, including an expansive definition of the national interest and the global necessities of politics in a changing environment, are explored in later sections. The conclusion offers some tentative suggestions for reformulating post-Cold War security agencies' mandates and practices.

**Davis, Jack. (1991). "Combating Mind-Set: Improving the Quality of Analysis."** ***Studies in Intelligence (Unclassified Edition),*** **35(5).**

When intelligence analysts cannot rely solely on factual evidence to address questions of concern to U.S. national security, they have to begin to employ judgment. In effect, when we do not know, we *estimate*. And when analysts estimate they depend on *mind-set*. For the purpose of this article, mind-set is the distillation of the intelligence analyst's cumulative factual and conceptual knowledge into a framework for making estimative judgments on a complex subject. Case studies on Agency analytic performance indicate that analysts and managers alike do not pay their dues to this powerful phenomenon. Analytic procedures and practices, herein called *tradecraft*, that do not ensure against or otherwise combat mind-set put the resultant assessments at high risk of either being wrong or being unread.

**Davis, Jack. (1995). "A Policymaker's Perspective on Intelligence Analysis."** ***Studies in Intelligence (Unclassified Edition),*** **38(5).**

This article is based on the author's interviews during 1991-93 of Ambassador Robert D. Blackwill. The original pillar of Ambassador Blackwill's doctrinal views on intelligence and policy was self-interest--his effort to make the relationship work for him personally under trying conditions. He served as Special Assistant to the President and Senior Director for European and Soviet Affairs, National Security Council Staff, during 1989-90, a tumultuous period that witnessed the collapse of the Soviet Union and the reshaping of Europe. The more lasting pillar is his concern for the national interest--a belief that the United States can ill afford prevailing patterns of ineffective ties between experts on events overseas and policymakers in Washington.

**Davis, Jack. (2002). "Improving CIA Analytic Performance: Strategic Warning."** ***Sherman Kent Center for Intelligence Analysis, Occasional Papers,*** **1(1).**

A host of reports have been written over the 50 years of CIA history evaluating analytic performance and recommending changes in priorities and tradecraft. These "post-mortem reports" have been issued by Agency leaders and components as well as by Congressional committees and commissions and non-governmental organizations concerned about intelligence performance. Starting with the 1990s, post-mortem reports increased in number, generated both by charges of specific intelligence failures and by general recognition that the post-Cold War period presented new challenges to intelligence.

The recent post-mortem reports have helped Directorate of Intelligence leaders to examine current doctrine and practice critically, and to address identified challenges in training programs. This Occasional Paper is one of a series of assessments of what recent critiques have said about the key challenges facing the DI in the new century.

The present paper addresses the challenges of strategic warning. It reviews five post-mortem critiques: (1) Douglas J. MacEachin, "Tradecraft of Analysis," U.S. Intelligence at the Crossroads: Agendas for Reform (1995); (2) Adm. David Jeremiah (R), Intelligence Community's Performance on the Indian Nuclear Tests (1998); (3) CIA, Office of Inspector General, Alternative Analysis in the Directorate of Intelligence (1999); (4) Report of the Commission to Assess the Ballistic Missile Threat to the United States (1998); (5) Working Group on Intelligence Reform of the National Strategy Information Center, The Future of US Intelligence (1996).

**Davis, Jack. (2002). "Improving CIA Analytic Performance: Analysis and the Policymaking Process."** ***Sherman Kent Center for Intelligence Analysis, Occasional Papers,*** **1(2).**

The recent post-mortem reports have helped Directorate of Intelligence leaders to examine current doctrine and practice critically, and to address identified challenges in training programs. This Occasional Paper is one of a series of assessments of what recent critiques have said about the key challenges facing the DI in the new century.

The present paper addresses the challenge of establishing effective analyst-policymaker relations. It reviews five post-mortem critiques: (1) Twentieth Century Fund Task Force on the Future of Intelligence, *In from the Cold (1996)*; (2) Independent Task Force of the Council on Foreign Relations, *Making Intelligence Smarter: The Future of U.S. Intelligence (1996)*; (3) Commission on the Roles and Capabilities of the United States Intelligence Community, *Preparing for the 21st Century: An Appraisal of U.S. Intelligence (1996)*; (4) *Report of the Commission to Assess the Ballistic Missile Threat to the United States (*1998); (5) Working Group on Intelligence Reform of the National Strategy Information Center, *The Future of US Intelligence* (1996).

**Davis, Jack. (2002). "Improving CIA Analytic Performance: DI Analytic Priorities."** ***Sherman Kent Center for Intelligence Analysis, Occasional Papers*****, 1(3).**

The recent post-mortem reports have helped Directorate of Intelligence leaders to examine current doctrine and practice critically, and to address identified challenges in training programs. This Occasional Paper is one of a series of assessments of what recent critiques have said about the key challenges facing the DI in the new century.

The present paper addresses the challenge of establishing priorities among competing uses of analytic resources (for example, current trend reporting vs. customized "action" analysis vs. in-depth studies). It reviews six post-mortem critiques: (1) Twentieth Century Fund Task Force on the Future of Intelligence, *In from the Cold* (1996); (2) Adm. David Jeremiah (R), Intelligence Community's Performance on the Indian Nuclear Tests (1998); (3) Report of the Commission to Assess the Ballistic Missile Threat to the United States (1998); (4) Independent Task force of the Council on Foreign Relations, Making Intelligence Smarter: The Future of U.S. Intelligence (1996); (5) Commission on the Roles and Capabilities of the United States Intelligence Community, Preparing for the 21st Century: An Appraisal of U.S. Intelligence (1996); (6) Staff Study, Permanent Select Committee on Intelligence, House of Representatives, IC21: Intelligence Community in the 21st Century (1996).

**Davis, Jack. (2003). "If Surprise is Inevitable, What Role for Analysis?"** ***Sherman Kent Center for Intelligence Analysis, Occasional Papers*****, 2(1).**

Strategic warning, to be effective, has to be credible in assessing contingent dangers and has to facilitate policymaker decision and action to protect against these dangers. This paper tables for consideration and debate several recommendations to advance two goals: To reconstitute strategic warning as a collaborative governmental function by engaging policy officials responsible for effecting defensive measures in every step of the analysis process, including topic selection and trend monitoring, and to warrant a distinctive intelligence contribution to a collaborative warning effort by expanding dedicated analytic resources and sharpening requisite substantive expertise and specialized tradecraft.

**Davis, Jack. (2003). "Tensions in Analyst-Policymaker Relations: Opinions, Facts, and Evidence."** ***Sherman Kent Center for Intelligence Analysis, Occasional Papers*****, 2(2).**

This paper has argued that policymaker criticism of DI analysis on hot-button issues is not an exceptional challenge but a largely normal clash of conflicting professional priorities between analysts and policymakers as two distinct national security tribes. Below is an attempt to provide general tradecraft guidance for analysts based mainly on personal experience and research. Because contentious

issues usually generate an expansion in requests for analytic deliverables and a compression of deadlines, managers are advised to invest in incremental development of identified analyst skills before sustained policymaker criticism strikes.

The general message of these recommendations is that analysts should take the tradecraft elements of policymaker criticism seriously. Analysts should enhance, first, understanding of the dynamics of national security policy making, second, their vulnerability to misperception and, third, their skills in remedial practices. The goal—by raising standards of practice—is to take tradecraft issues off the table, so to speak, in an effort to isolate and defuse any politically motivated elements.

**Dempsey, Michael P. and William C. Prillaman. (2004). "Mything the Point: What's Wrong with the Conventional Wisdom about the C.I.A."** ***Intelligence and National Security*** **19(1): 1-28.**

This article examines seven myths about the Central Intelligence Agency. These misperceptions persist because of an inadequate understanding of the relationship between intelligence and policy, outdated stereotypes that ignore recent *reforms*, and the politics that accompany delivering bad news to senior officials. Scholars and intelligence officers looking to advance the debate on intelligence issues could usefully focus their research on several core dynamics: sharpening the distinction between intelligence failures and policy failures; deconstructing intelligence successes to determine whether those 'best practices' can be replicated elsewhere; and monitoring the risks when an apolitical intelligence agency closely interacts with the policy community.

**DeRosa, Mary. (2004).** ***Data Mining and Data Analysis for Counterterrorism*****. Washington, DC: CSIS Press.**

Defeating terrorism requires a more nimble intelligence apparatus that operates more actively within the United States and makes use of advanced information technology. Data-mining and automated data-analysis techniques are powerful tools for intelligence and law enforcement officials fighting terrorism. But these tools also generate controversy and concern. They make analysis of data – including private data – easier and more powerful. This can make private data more useful and attractive to the government. Data-mining and data-analysis are simply too valuable to prohibit, but they should not be embraced without guidelines and controls for their use. Policymakers must acquire an understanding of data-mining and automated data-analysis tools so that they can craft policy that encourages responsible use and sets parameters for that use.

This report builds on a series of roundtable discussions held by CSIS. It provides a basic description of how data-mining techniques work, how they can be used for

counterterrorism, and their privacy implications. It also identifies where informed policy development is necessary to address privacy and other issues (DeRosa).

**Deutch, John and Jeffrey Smith. (2002). "Smarter Intelligence."** ***Foreign Policy,*** **128: 64-70.**

Many proposals have been put forward to improve U.S. intelligence capabilities. Decisions on intelligence reform will revolve around this question of the proper balance between national security and law enforcement goals. Meanwhile, historical boundaries between organizations remain, stymieing the collection of timely intelligence and warnings of terrorist activity. This fragmented approach to intelligence gathering makes it quite possible that information collected by one U.S. government agency before an overt act of terrorism will not be shared and synthesized in time to avert it.

A larger question underlying discussions of intelligence reform is, how much should Americans expect from the intelligence community? While the American people can be better protected, they should be under no illusion that the intelligence community can remove all risk… Fortunately, there are not hundreds of [terrorist] organizations but perhaps only a few dozen, which makes the intelligence task feasible. But it is unreasonable to expect 100 percent success. Thus, while intelligence is the first line of defense, other counterterrorism efforts are also important, including prevention by deterrence or interdiction, bioweapons defense, and managing the consequences of a catastrophic terrorist attack whenever and wherever it occurs (Deutch and Smith).

**Doran, Charles F. "Why Forecasts Fail: The Limits and Potential of Forecasting in International Relations and Economics."** ***International Studies Review,*** **1(2): 11-42.**

A forecast is a prediction based on knowledge of past behavior. The forecaster must consider to what extent past trends will continue in the future. In linear forecasts, the past is prologue, and forecasting amounts to linear extrapolation of the past trend into the future. When conditions are propitious and behavior over time is approximately linear, the linear forecast will fit the data tolerably well. But forecasts ultimately fail because no technique has been developed that allows the forecaster to predict, prior to the event itself, when a nonlinearity will occur. This essay argues that a nonlinearity is a critical point at which expectations (predictions) induced by the prior trend suddenly confront a profound alteration in that trend, indeed, an abrupt inversion. A nonlinearity is a total break from the past trend, a discontinuity. The theory of relative power (systemic structure) dynamics known as power cycle theory provides both a thorough, graphic explanation of this discontinuity in expectations that occurs at critical points in the process, and the reason why nonlinearities are impossible to derive from prior trends. Theoretical and empirical assessment of a process and its dynamics makes possible an explanation of the conditions that give rise to such nonlinearity.

Hence such dynamical analysis can predict that such a nonlinearity will occur, but in all but a closed system it still cannot predict when the nonlinearity will occur.

**Dupont, Alan. (2003). "Intelligence for the Twentieth-First Century."** ***Intelligence and National Security,*** **18(4): 15-39.**

The transformation of intelligence architectures, particularly in the West, is no less profound than that of the weapons, platforms, warfighting systems and governments they are designed to support and inform. Moreover, the cumulative weight of the changes in prospect will redefine the way in which intelligence is used and conceived. The old demarcation lines between strategic and operational intelligence and between operations and intelligence, once starkly differentiated will blur. Decision-makers will have better access to intelligence as a result of advances in 'pull' technology, which have made possible intelligence on demand while open source intelligence will enrich and add value to national intelligence databases.

Although information will become more plentiful and less of a privileged source in the global information environment of the twenty-first century, paradoxically the demand for timely, high quality strategic and operational intelligence will intensify rather than diminish. What will distinguish the successful practitioners of twenty-first century intelligence is the ability to fuse and integrate all elements of the process to provide seamless support for policy-makers and operational commanders. However, despite impressive advances in integration, technical collection and communications no intelligence system, no matter how efficacious, will ever be able to completely dispel the fog of war.

**Fishbein, Warren and Gregory Treverton. (2004). "Making Sense of Transnational Threats."** ***Sherman Kent Center for Intelligence Analysis, Occasional Papers,*** **3(1).**

Co-authored by Warren Fishbein of the Kent Center's Global Futures Partnership and Gregory Treverton of the RAND Corporation, the paper proposes some practical ideas for adapting the organizational culture and processes in which analysis of these issues is done to improve understanding and warning.

The authors use as a springboard for their discussion the ideas generated by a series of unclassified, multidisciplinary workshops with outside experts convened by GFP and RAND during 2003 to explore "Developing Alternative Analysis for Transnational Issues." (Reports of these workshops are published separately by RAND Corporation in report CF-200.) In this paper, workshop insights are coupled with findings from further research on concepts such as intuitive thinking, sense-making, and mindfulness to suggest an approach for applying what the authors call "alternative sense-making" to complex transnational issues.

The ideas suggested here, however, are less a prescription for analytical practice than an invitation to dialogue, debate, and further research that will help advance the doctrine of analysis for transnational threats.

**Fulghum, David A. (2001). "Intelligence Analysis Shifts Closer to Combat."** ***Aviation Week & Space Technology*****, 154(25): p. 179.**

Reports on the shift of military intelligence closer to combat, with knowledge of friend and foe more important than weapons. Initiative of the United States Air Force in Europe; Deployable Ground Station Four; Distributed Common Ground System; Changes in the processing, exploitation and distribution of intelligence products.

**Garst, Ronald and Max Gross. (1997). "On Becoming an Intelligence Analyst."** ***Defense Intelligence Journal,*** **6(2): 47-59.**

The authors seek to describe the "set of talents, skills and personal characteristics required of the successful all-source intelligence analyst." (Abstract from http://intellit.muskingum.edu/alpha_folder/D_folder/defij_analysis.html.)

**Gentry, John A. (1995). "Intelligence Analyst/Manager Relations at the CIA."** ***Intelligence and National Security*****, 10(3): 133-146.**

The day-to-day, seemingly mundane interactions between analysts and their supervisors have major influences on the ultimate quality and usefulness of the analysis that intelligence agencies provide to their policymaking consumers. These influences can have positive or negative effects, but they become enduringly pernicious when poor analyst/manager relationships are systematized into a dysfunctional 'culture'. The mechanics and significance of these relationships have received scant attention from academics and public policy commentators. The aim here is to describe and assess the relationship between analysts and their managers in the United States Central Intelligence Agency's Directorate of Intelligence (DI) in the 1980s and early 1990s. The CIA's culture changed markedly in this period from that of previous decades.

**Gentry, John A. (1993).** ***Lost Promise: How CIA Analysis Misserves the Nation*****. Lanham, MD: University Press of America.**

Lost Promise describes and critiques the Directorate of Intelligence of the Central Intelligence Agency-the analytical arm of the agency. Gentry first describes the DI's historical and avowed mission, and in so doing, he sets a standard for comparison with the troubled operations of the DI since the early 1980s. He proposes an 18-point reform program and helps to lift the fog that surrounds the CIA and which protects it from serious external evaluation. Gentry corrects misunderstandings about CIA analysis and explains how analysis can become biased or "politicized."

**George, Roger Z. (2004). "Fixing the Problem of Analytical Mind-Sets: Alternative Analysis."** ***International Journal of Intelligence and Counterintelligence*****, 17(3): 385-404.**

"Mind-sets" can pose a fatal trap in [the intelligence] process: history is full of examples in which commanders have erred because they held to an inaccurate picture of the other's value, or their goals, intentions, or capabilities. A simple definition of a mind-set might be a series of expectations through which a human being sees the world. Over time, the strategist and intelligence analyst develop these expectations, based on how past events have occurred; each will draw general conclusions about the relationships among important international phenomena, about how states typically behave (e.g., maximizing power vis-à-vis others), or about foreign leaders' motivations. As new events occur, data consistent with earlier patterns of beliefs are more likely to be accepted as valid, while data that conflicts with an analyst's expectations is discounted or set aside. It is human nature, according to many psychological studies, for individuals to "perceive what they expect to perceive," and holding such mind-sets is virtually unavoidable. The more expert one becomes, the more firm become one's set of expectations about the world. While these mind-sets can be very helpful in sorting through incoming data, they become an Achilles heel to a professional strategist or intelligence analyst when they become out of date because of new international dynamics. Knowing when a mind-set is becoming obsolete and in need of revision can test the mettle of the best expert.

This challenge has no perfect or permanent solutions. But the past decade has brought a greater recognition that the application of rigorous analytic techniques can help significantly in averting the likelihood of surprise by uncovering analytical mind-sets and sensitizing policymakers to the inherent uncertainty surrounding major international developments that they confront each day. U.S. strategists would do well to understand these advances in analytical tradecraft, in order to encourage the Intelligence Community to better exploit them and to guard against susceptibility to distorted or inaccurate views of the world.

**Gill, Peter. (2004). "Securing the** ***Globe:*** **Intelligence and the Post-9/11 Shift from 'Liddism' to 'Drainism'."** ***Intelligence and National Security*****, 19(3).**

Significant shifts have been underway in security intelligence agencies and processes since the 11 September 2001 attacks in the United States. Whereas the previous quarter of a century had seen a considerable democratization of intelligence, the article examines whether UK and US government responses risk the re-creation of 'security states'. Changes since 9/11 in law, doctrine, the intelligence process - targeting, collection, analysis, dissemination and action - and oversight are considered and it is concluded that there is a danger of the rebirth of independent security states.

**Goldman, David and Taylor, Stan A. (2004). "Intelligence Reform: Will More Agencies, Money, and Personnel Help?"** ***Intelligence and National Security,*** **19(3): 416-435.**

The contemporary political climate is virtually demanding significant intelligence reforms based on what are seen as poor performances in recent crises. Many of these demands will ask for new agencies, more money, and more personnel. Such actions could well worsen the US intelligence process rather than strengthen it. However, now is a propitious time to make certain internal reforms and to find a way for the Intelligence Community to be truly integrated.

**Gourley, Robert. (1997). "Intuitive Intelligence."** ***Defense Intelligence Journal,*** **5(2): 61-75.**

In times of crisis, analysts "are expected to do what they have been taught their whole career to avoid; they must make rapid assessments of enemy intentions and well developed projections based on intuition." The author makes some suggestions on how analysts might be better prepared to respond to requirements for instantaneous assessments. (Abstract from http://intellit.muskingum.edu/alpha_folder/D_folder/defij_analysis.html.)

**Grabo, Cynthia M. (2004).** ***Anticipating Surprise: Analysis for Strategic Warning.*** **Lanham, MD: Rowman & Littlefield.**

Anticipating Surprise, originally written as a manual for training intelligence analysts during the Cold War, has been declassified and condensed to provide wider audiences with an inside look at intelligence gathering and analysis for strategic warning. Cynthia Grabo defines the essential steps in the warning process, examines distinctive ingredients of the analytic method of intelligence gathering, and discusses the guidelines for assessing the meaning of gathered information. Since the September 11, 2001 terrorist attacks on America, intelligence collection and analysis has been hotly debated. In this book, Grabo suggests ways of improving warning assessments that better convey warnings to policymakers and military commanders who are responsible for taking appropriate action to avert disaster.

**Grau, Lester W. (2004). "Something Old, Something New: Guerillas, Terrorists, and Intelligence Analysis."** ***Military Review,*** **84(4): 42-49.**

Focuses on the importance of U.S. military intelligence to counter guerrilla warfare and terrorism in Iraq and Afghanistan. Background on the guerilla warfare in Afghanistan and Iraq being countered by the U.S. Armed Forces; Tools in counterinsurgency that can provide data to a military intelligence analyst; Police technique that combines spatial analysis and psychological behavior patterns of criminals; Role of translators and interrogators in human military intelligence.

**Grundmann, William R. (1997). "Reshaping the Intelligence Production Landscape."** ***Defense Intelligence Journal,*** **6(2): 23-33.**

The "viability of the Intelligence Community will depend on the seamless integration of the separate intelligence organizations and the functional elements within those organizations." One problem area is that "[w]e are, increasingly, upping the pace of current intelligence production and allotting the commensurate level of analytic manpower to meet the requirements of continuous contingencies and crises. At the same time, we have incurred significant reductions in analytic resources as a result of funding cuts over the last five years." (Abstract from http://intellit.muskingum.edu/alpha_folder/D_folder/defij_analysis.html.)

**Haass, Richard. (1996).** ***Making Intelligence Smarter: The Future of U.S. Intelligence.*** **New York, NY: Council on Foreign Relations.**

The U.S. Intelligence Community faces major challenges, including a widespread lack of confidence in its ability to carry out its mission competently and legally. One consequence of this perception is that reform of intelligence policy and capabilities will not be left up to the intelligence community itself. Other parts of the executive branch and Congress will certainly be involved. It is no less true, however, that the intelligence community has been adjusting to the changed demands of the post-Cold War world for several years and, for the most part, appears to be providing reliable and useful information to its customers. Additional reform is necessary, but should not create more problems than it solves and, in so doing, weaken a critical tool of U.S. national security.

The recommendations of this Task Force fall under three headings: measures to improve the intelligence product, suggestions for internal reorganization, and steps to build or rebuild relationships with important external constituencies.

**Hansen, Brian. (2002). "Intelligence Reforms."** ***CQ Researcher,*** **12:3.**

Intelligence officials were warned in 1995 that terrorists were plotting to hijack airliners and crash them into landmark buildings in the United States. Yet, the horrific events that unfolded on Sept. 11 took the CIA, the FBI and the rest of the U.S. intelligence community by surprise. Some experts call the attacks the worst intelligence failure in American history, while others maintain that the nation's spy agencies had no way of detecting or preventing the multi-pronged, international conspiracy. This much is certain: The attacks have prompted lawmakers to impose major changes on the nation's intelligence-gathering agencies. But the rush to overhaul the intelligence apparatus troubles some experts, who fear the changes will be ineffective. Others say the reforms have breached the traditional wall between criminal investigations and intelligence gathering, potentially curtailing citizens' civil liberties.

**Harris, Shane. (2003). "Beautiful Minds."** ***Government Executive,*** **35(13): 21-34.**

Two years after the Sept. 11 attacks, U.S. intelligence agencies still rely on practices that thwart or water down insightful analysis, critics say. Congressional reports and inquiries into lapses in intelligence have criticized the agencies as vast, befuddled bureaucracies. Most critiques of the CIA and a dozen other intelligence agencies have said they must become more "modern" organizations, better equipped to fight terrorists. But when any organization truly changes, it is usually from within and not according to the prescriptions of critics.

Because that is so, intelligence analysts, especially the most creative ones, offer the best hope that American spy agencies will find ways to better understand and prevent terrorism. Fixated for the past half-century on the Soviet Union and its vast, lumbering bureaucracy, most analysts only recently have had to think like the nimble, shadowy terrorists they now face. But insightful analysis hasn't been widely embraced. The intelligence community sometimes is stifled by a compulsion to speak with one voice. The customers of intelligence agencies elected officials and senior leaders in federal agencies want harmony, not dissonance. Often, only the least conventional thinkers can tune out the noise and find the true notes (Harris).

**Hedley, John Hollister. (2005). "Learning from Intelligence Failures."** ***International Journal of Intelligence and Counterintelligence,*** **18(3): 435-450.**

The Russians have a host of sayings, and one that seems pertinent goes like this: "If you see a Bulgarian on the street, beat him up. He will know why." Given the enormously tragic events of 11 September 2001, and the dismaying absence of weapons of mass destruction in post-invasion Iraq, any Central Intelligence Agency (CIA) officer seen on the street in Langley, Virginia, could be pummeled and would likely be someone who would know why. For nearly four years it has been hard to go wrong by criticizing the Agency.

But putting this pummeling—verbal pummeling, thankfully—into perspective is possible and desirable. It is part and parcel of the "intelligence school of hard knocks." It can be put into perspective with four simple observations:

* Allegations of intelligence failure are inevitable.
* This is true in large part because, in intelligence, failures are inevitable.
* Intelligence organizations do learn (as well as suffer) from the allegations and the failures.
* Even though it is impossible to learn once and for all how to prevent the recurrence of something inevitable, the ratio of success to failure probably can be improved.

**Heuer, Jr., Richards J. (2004). "Limits of Intelligence Analysis." *Orbis* 49(1): 75-94.**

The Senate Select Committee on Intelligence (SSCI) Report on the U.S. Intelligence Community's Prewar Intelligence Assessments on Iraq, dated July 7, 2004, provides a remarkably detailed account of information available to the intelligence community prior to the war in Iraq and how it was analyzed. The general impression it gives is one of unconscionable failure, due to the intelligence community's very poor analysis of the information. Unfortunately, the magnitude and breadth of the Committee's criticism shows a serious lack of understanding of the problems intelligence analysts face when making judgments based on incomplete, ambiguous, and potentially deceptive information.

This article applies insights from the psychology of intelligence analysis to help explain what went wrong and why. It also discusses broader questions not addressed in the SSCI report: What can we reasonably expect from intelligence analysis? And what methods and procedures are available to improve intelligence analysis?

**Heuer, Jr., Richards J. (1999). *The Psychology of Intelligence Analysis.* Washington, DC: U.S. Government Printing Office.**

How do you beat cognitive biases? How do you set aside preconceived mind-sets and mental models? The author emphasizes the importance of not only analyzing the substance of intelligence problems, but also of understanding the analytic thought processes. He maintains that thinking analytically is a skill like carpentry or driving a car -- it can be taught, it can be learned, and it can be improved with practice. Heuer examines cognitive biases -- subconscious pre-conceptions that impair objectivity and skew analysis in such areas as evaluation of evidence, recognition of signs of change, perception of cause and effect, and estimation of future probabilities. Heuer offers techniques for confronting such biases and diluting their impact. This book is written in a clear, crisp, concise, jargon-free mode that is readily understandable. It is of value not only to other intelligence professionals -- that is, to managers, trainers, collectors, and technicians but also to anyone that has to analyze or make judgments, decisions, and predictions about problems and choices that arise in the course of day-to-day life.

**Hillsman, Roger. (1995). "Does the CIA Still Have a Role?" *Foreign Affairs,* 74(5): 104-117.**

The history of intelligence since World War I shows no dividends resembling the miracles of spy-thriller fiction. The benefits gained by fielding a worldwide team of secret agents are not worth the exorbitant cost. Spies sometimes provide useful information on weapons development and other long-term threats; usually their information is outdated or irrelevant. The CIA should stick to its strengths: analysis for policymakers and high-tech surveillance. Cloak-and-dagger foreign policy tempts presidents into shirking the hard work of diplomacy and politics.

The practice has blackened America's reputation and subverted its democracy (*Foreign Affairs* Abstract).

**Hollywood, John, Diane Snyder, Kenneth N. McKay, and John E. Boon. (2004). *Out of the Ordinary: Finding Hidden Threats by Analyzing Unusual Behavior.* Santa Monica, CA: RAND Corporation.**

Presents a unique approach to selecting and assembling disparate pieces of information to produce a general understanding of a threat. The Atypical Signal Analysis and Processing schema identifies atypical behavior potentially related to terror activity; puts it into context; generates and tests hypotheses; and focuses analysts' attention on the most significant findings. A supporting conceptual architecture and specific techniques for identifying and analyzing out-of-the-ordinary information are also described.

**Hulnick, Arthur S. (1999). *Fixing the Spy Machine: Preparing American Intelligence for the Twenty-First Century*. Westport, CT: Praeger.**

With the end of the Cold War and the dawning of a new century, the U.S. intelligence system faces new challenges and threats. The system has suffered from penetration by foreign agents, cutbacks in resources, serious errors in judgment, and what appears to be bad management; nonetheless, it remains one of the key elements of America's strategic defense. Hulnick suggests that things are not as bad as they seem, that America's intelligence system is reasonably well prepared to deal with the many threats to national security. He examines the various functions of intelligence from intelligence gathering and espionage to the arcane fields of analysis, spy-catching, secret operations, and even the business of corporate espionage (Synopsis from amazon.com).

**Hulnick, Arthur S. (2002). *"The Downside to Open Source Intelligence." International Journal of Intelligence and Counterintelligence*, 15(4): 565-579.**

Intelligence analysts, whether in government or the private sector, agree that open source data is the bread and butter of analysis, forming the great bulk of the material with which they must work. Open sources also provide the collateral material that informs and helps drive the intelligence collection process. No good case officers or intercept technicians can make sense out of what they learn without comprehensive knowledge of the world that surrounds their human or electronic sources. The argument for expanding the use of open source intelligence (OSINT) is made compellingly by Robert David Steele. Yet, some negative aspects of OSINT deserve attention.

**Hulnick, Arthur S. (2004). *Keeping Us Safe: Secret Intelligence and Homeland Security*. Westport, CT: Praeger.**

How can the United States guard against a clever unknown enemy while still

preserving the freedoms it holds dear? Hulnick explains the need to revamp U.S. intelligence operations from a system focused on a single Cold War enemy to one offering more flexibility in combating non-state actors (including terrorists, spies, and criminals) like those responsible for the attacks of September 11, 2001. Offering possible solutions not to be found in the federal commission's official report, Hulnick's groundbreaking work examines what is really necessary to make intelligence and homeland security more efficient and competent, both within the United States and abroad.

**Ignatius, David. (2005, April 15). "Can the Spy Agencies Dig Out." *The Washington Post,* p. A25.**

The uncertainty within the intelligence community was evident at a conference last week at Harvard, where 100 or so spooks gathered with a few academics and journalists to discuss ways to restructure intelligence for the 21st century. I wish [John Negroponte] had been there to hear some of the ideas, and also to get a sense of just how disoriented intelligence professionals are these days.

To correct this deficiency, the IC must refocus its management and organizational structure around substantive national security missions rather than collection He's walking into a world where people aren't sure which end is up.

It's time for Negroponte to start rebuilding, but how? The new structure he will oversee as director of national intelligence is the biggest mystery of all. Will his organization be the new center for intelligence analysis? If so, what will happen to the many hundreds of folks who work at the CIA's Directorate of Intelligence? Will the DNI's new National Counterterrorism Center be the focal point for anti-terrorism operations, effectively superseding the authority of the CIA's Directorate of Operations? Nobody seems to know the answers to these big questions, which is worrisome.

So here's a modest suggestion for Negroponte: When it comes to intelligence reform, less is more. We need fewer, smarter people who are empowered to take risks and make bold judgments. We don't need a proliferation of new, inexperienced intelligence officers overseas who will fill quotas by recruiting bogus agents who produce large volumes of low-quality intelligence. We need real spies, not "measurable metrics."

**Intelligence and Analysis on Iraq: Issues for the Intelligence Community. (29 July 2004). Kerr Group Reports.**

A series of three reports analyzing the intelligence process before the war, describing factors affecting the drafting of the NIE, and identifying systemic factors that channeled analysts' evaluations and analyses. Identifies failures of collection, uncritical analytic assumptions, and inadequate management reviews.

**“Intelligence Gathering: Evaluating Sources for Objective Analysis.” (2000). *Online,* 24(1): 47-50.**

There is little doubt that the information revolution has changed the way we all do business. Intelligence analysis is no exception. More information is now available to the analyst than ever before. However, more information is not necessarily synonymous with better information. To intelligence consumers, the product is only as credible as the sources from which it comes. And this basic concept that "intelligence must be based on credible objective information" is the exact reason why it is important to evaluate sources for intelligence analysis.

This article will define both national and business intelligence, enumerate several factors of evaluation, consider some sources, identify some places which provide evaluations, and conclude with some ideas for further consideration. Also note that this article only considers open sources which are available for all to use. It will not delve into the secret, human, or technical means of collecting information (*Online).*

**“Intelligence Incorporated.” (2005). *Government Executive,* 37(8): 40-46.**

Eurasia Group, a privately held firm based in Manhattan, looks and acts the way U.S. intelligence agencies might have to if they're going to implement the sweeping reforms that lawmakers and administration officials promise are in store. Some intelligence agencies already rely on Eurasia, and other private shops like it, to make sense of publicly available information and to gain expertise they lack in-house. But intelligence reformers insist the agencies must seek out such experts more frequently to fill gaps in the information that spies can provide. Proponents of outside analysis argue that the government doesn't always need classified information to understand the direction of the world. Open source information often is well documented, and because it has been disseminated widely, a broader range of experts who might discover details that others miss can review it. Of course, it's also collectible by just about anyone with an Internet connection or a library card. And this contradicts the ethos of much of U.S. intelligence: The best information is the hardest to get and it must be jealously guarded. Because information is power, the more things the government knows that others don't, the stronger the government.

**Johnson, Loch K. (1996). "Analysis for a New Age." *Intelligence and National Security,* 11(4): 657-671.**

Working from his base on the staff of the Commission on the Roles and Capabilities of the U.S. Intelligence Community (the "Aspin-Brown Commission"), Johnson reviews the state of U.S. intelligence analysis and offers his thoughts on how it might be made better. He argues that intelligence analysis must be "consumer-driven"; that is, analysts "must design the intelligence product to suit the informational -- though certainly not the political -- needs of the

consumer." He also urges more attention to "marketing" of its product on the part of the Intelligence Community.

**Johnson, Rob. (2005). Analytic Culture in the US Intelligence Community: An Ethnographic Study. Washington, DC: Center for the Study of Intelligence.**

The author conducted several hundred interviews with intelligence community analysts and used these data to characterize the organizational culture of the analytic enterprise within the US intelligence community. Characteristics are broken down into systemic, systematic, idiosyncratic, and communicative variables. The study uses this methodology to develop several recommendations for improving analysis.

**Jones, Morgan D. (1998). *The Thinker's Toolkit: 14 Powerful Techniques for Problem Solving*. New York, NY: Three Rivers Press.**

Former CIA analyst Morgan Jones provides techniques that are easy to learn and easy to apply, requiring no more equipment than a pencil and a legal pad. Armed with *The Thinker's Toolkit*, anyone in business can start making better decisions today – with immediate benefits to the bottom line.

**Kamarck, Elaine C. (October 2005). *Transforming the Intelligence Community: Improving the Collection and Management of Information*. Transformation of Organization Series, IBM Center for the Business of Government.**

Since the end of the Cold War, the intelligence community has engaged in much soul searching but with little action. While the 9/11 attacks have prompted action, the solutions enacted so far do not get to some of the real world problems in the community. The field of knowledge management is a convenient starting point for attempting to understand what has to happen for the IC to become capable of dealing with 21st century threats. Knowledge management suggests that the IC of the future should seek to combine the tacit knowledge of the organization with its explicit knowledge. The report concludes with eight recommendations aimed at building a different, more comprehensive intelligence community.

**Khalsa, Sundri. (2004). *Forecasting Terrorism: Indicators and Proven Analytic Techniques.* Lanham, MD: Rowman & Littlefield.**

Terrorist attacks happen after years of careful planning; however, these plans always leave a trail of activities—a road map to the terrorists' forthcoming actions. These indicators include terrorist travel, movement of weapons, training, target surveillance, and tests of security. This guidebook identifies 68 such indicators and shows how to analyze them using a step-by-step explanation. It also includes safeguards against 38 of the 42 common warning pitfalls that experts have identified. That analysis then yields warnings that can prevent

attacks and save lives. The methodology can be applied to any intelligence topic (not just terrorism) by simply changing the list of indicators.

Warning failures are rarely due to inadequate collection; they are more frequently due to intelligence that has been ignored because it is delivered with weak analysis. With this model, author Sundri Khalsa brings sophisticated analysis methodology to security forces everywhere, promising a safer world.

This methodology was characterized by the Unit Chief of the Federal Bureau of Investigation (FBI) Counterterrorism Threat Monitoring Unit as "light-years ahead," while officials in the Defense Intelligence Agency (DIA) have identified this system as "the bedrock for the evolving approach to terrorism analysis," and an "unprecedented forecasting model." This guide will be of interest to policy makers, journalists, police authorities, and concerned citizens.

**Kindsvater, Larry. (2003). "The Need to Reorganize the Intelligence Community."** ***Studies in Intelligence,*** **47:1.**

The Intelligence Community (IC) should be reorganized to more concertedly, effectively, and efficiently address today's national security intelligence needs. No one (except the Director of Central Intelligence) and no organizational entity is actually responsible for bringing together in a unified manner the entire IC's collection and analytic capabilities to go against individual national security missions and threats, such as terrorism, North Korea, the proliferation of weapons of mass destruction, and China, create new Community-wide, mission-oriented centers and have a leader who is truly "in charge." Taken together, these changes would fundamentally revamp the way the IC functions.

The changes recommended in this paper would fundamentally alter how the IC actually functions, making substantive national security missions/issues/threats the driving managerial force across the IC, and creating organized entities with someone in charge who is responsible for Community-wide efforts against specific national security missions. This arrangement would dramatically reduce the intelligence collection (stovepipe) management and organizational orientation of the IC. Moreover, it would place a DCI with expanded authorities at the top of an organization, the Central Intelligence Agency, that has an IC-wide (corporate) mission, responsibility, and authority (Kindsvater).

**Lahneman, William J. (2005). "Knowledge Sharing in the Intelligence Community Since 9/11."** ***International Journal of Intelligence and Counterintelligence,*** **17(4): 614-633.**

Since the quality of virtually all security and many foreign policies depend upon them, intelligence products constitute one extremely important type of knowledge product. Good intelligence analysis depends upon high-quality information getting to the appropriate analysts at the proper time so that knowledge creation

can occur. The article describes current research in the field of knowledge management and applies pertinent findings to analyze the flow of information and the creation of knowledge in the intelligence community. It then analyzes recent reform initiatives to determine if they are likely to improve or degrade knowledge management.

**Lahneman, William J. (2004). "Outsourcing the IC's Stovepipes?"** ***International Journal of Intelligence and Counterintelligence*****, 16(4): 573-593.**

The article surveys the business literature on outsourcing and determines why businesses continue to expand their use of this tool despite initial disappointments. Next, the needs and constraints of businesses are compared and contrasted with those of intelligence organizations, with the finding that both types of organizations have many of the same needs for both security and knowledge sharing. The article outlines the elements of the intelligence cycle that are candidates for outsourcing, argues that increased outsourcing would improve intelligence analysis, and offers a strategy for expanding outsourcing within the intelligence community.

**Lefebvre, Stéphane. (2004). "A Look at Intelligence Analysis."** ***International Journal of Intelligence and Counterintelligence*****, 17(2): 231-264.**

In the days that followed the tragic terrorist attacks that took place against the U.S. on September 11, 2001 several analysts and politicians were quick to assign blame to the U.S. intelligence agencies, in particular the CIA and the FBI. That these agencies could not prevent the attacks was considered an immense failure. Intelligence analysis, is not done in a vacuum, it needs a bureaucratic structure to hire analysts, support their work, and channel their judgments to policy consumers (*IJIC* Abstract).

**Looney, Robert E. (2004). "DARPA's Policy Analysis Market for Intelligence: Outside the Box or Off the Wall?"** ***International Journal of Intelligence and Counterintelligence*****, 17(3): 405-419.**

In 2003, the Defense Advanced Research Projects Agency (DARPA) proposed and subsequently backed off a plan to set up a kind of futures market, a Policy Analysis Market (PAM), that would allow investors to earn profits by betting on the likelihood of such events as regime changes in the Middle East. Critics, mainly politicians and newspaper op-ed writers, attacked the futures project on the grounds that it was unethical and in bad taste to accept wagers on the fate of foreign leaders and the likelihood of terrorist attacks. The project was canceled a day after it was announced. Its head, retired Admiral John Poindexter, subsequently resigned.

The debate over the Policy Analysis Market was quite contentious, but few answers have been found to several critical questions: How were the markets

supposed to work? What were PAM's underlying theoretical and empirical assumptions? What was PAM supposed to produce in the way of intelligence? Was the project an innovative way of thinking outside the box or just an off-the-wall idea?

**Lowenthal, Mark M. (2000). *Intelligence: From Secrets to Policy*. Washington, DC: CQ Press.**

The world of intelligence is filled with intrigue, but at its core, the information-secret or otherwise-is valuable to governments for the power it affords policy makers. With the constant need for background, context, and warning as well as an assessment of risks, benefits, and likely outcomes, the intelligence community plays a crucial role in policy formation. Lowenthal adeptly describes the development of this community while showing students how the various stages of the intelligence process serve an intelligence agenda that has changed dramatically in this post-Cold War, post-9/11 world. In this thoroughly revised second edition, Lowenthal updates each and every chapter, including new material on the infamous Robert Hanssen and Wen Ho Lee cases. Two new chapters significantly round out coverage: one on intelligence reform and another that takes a comparative look at intelligence in Britain, France, Russia, Israel, and China. This new edition also takes into account the impact and effects the war on terrorism now has on collection, analysis, and counter intelligence, as well as the ethical and moral issues surrounding these tasks (Synopsis from amazon.com).

**MacDonald, Margaret M. and Anthony G. Oettinger. (2002). "Information Overload: Managing Intelligence Technologies." *Harvard International Review,* 24(3): 44-48.**

Advances in scientific knowledge, translated into new technology, have made previously unmanageable intelligence tasks feasible and greatly increased the speed at which intelligence professionals perform traditional activities. And yet, problems that have always plagued intelligence seem impervious to the information revolution. The intelligence community and its customers no longer suffer from information scarcity but from information overload. Analysis must cover enormous quantities of data, in which valuable information may at best be implicit. Users still complain that the information pushed to them is not what they want or is not in a form they can use. On the other hand, knowing what to pull and how to pull it requires a rather sophisticated user -- and that user may overlook an important resource. As it collects intelligence, the intelligence community must constantly maintain a balance between reliance on technical means and more traditional sources (MacDonald and Oettinger).

**Mahle, Melissa Boyle. (2004).** ***Denial and Deception: An Insider's View of the CIA From Iran-Contra to 9/11*****. New York: Nation Books.**

Focuses on the performance of the CIA's Directorate of Operations, but raises several issues that affect the Directorate of Intelligence. Also analyzes negative effects of the rapid turnover in the CIA's leadership during the 19980s and 90s.

**Marchio, James D. (2005). "The Evolution and Relevance of Joint Intelligence Centers".** ***Studies in Intelligence,*** **49(1).**

One of the most common problems in joint operations is that of intelligence. The preferred solution lies in the establishment of a joint intelligence center. Information from all sources is fed into this central collecting point where it is collated, evaluated, and disseminated. Such an agency benefits not only the joint force commander, but all major commanders involved by currently posting them on the latest enemy information available.

**Marrin, Stephen P. (2004). "CIA's Kent School: Improving Training for New Analysts***."* ***International Journal of Intelligence and Counterintelligence,*** **16(4): 609-637.**

This article provides the history behind the creation of CIA's Sherman Kent School in 2000, describes the CIA's career analyst program for new analysts circa mid-2002 (based on interviews with the Kent School's director and three program managers), assesses the hypothetical benefits that improved training could have on institutional output, and places the training program back within institutional context by arguing that improved training won't be able to achieve its potential if organizational structures and bureaucratic processes are not aligned in ways that are consistent with an analyst's acquisition and application of analytic expertise.

**Marrin, Stephen P. (2003). "Homeland Security and the Analysis of Foreign Intelligence."** ***Intelligencer,*** **13(2): 25-36.**

This background paper describes how foreign intelligence analysis contributes to homeland security. It begins with a description of the structure and operations of the intelligence community, and then focuses more tightly on CIA's analytic practices before addressing the role of the DCI's Counterterrorist Center in providing intelligence analysis to national level decisionmakers. This paper provides similar content but at a much greater level of granularity to the subsection titled "An Analyst's Daily Taskings" and "The Finished Product" on pages 6-8 of the July 2004 Senate Select Committee on Intelligence's Report on the U.S. Intelligence Community's Prewar Intelligence Assessments on Iraq.

**Marrin, Stephen P., and Jonathan D. Clemente. (2006). "Improving Intelligence Analysis by Looking to the Medical Profession."** ***International Journal of Intelligence and Counterintelligence*****, 18(4): 707-729.**

Intelligence agencies might benefit from assessing existing medical practices for possible use in improving the accuracy of intelligence analysis and its incorporation into policymaking. The processes used by the medical profession to ensure diagnostic accuracy may provide specific models for Intelligence Community use that could improve the accuracy of analytic procedures. The medical profession's way of accumulation, organization, and use of information for purposes of decisionmaking could also provide a model for the national security field to adopt in its quest for more effective means of information transfer. Some limitations to the analogy are inevitable due to intrinsic differences between the fields, but the study of medicine could provide intelligence practitioners with a valuable source of insight into various reforms with the potential to improve the craft of intelligence.

**Marrin, Stephen P. (2005). "Preventing Intelligence Failures By Learning From the Past."** ***International Journal of Intelligence and Counterintelligence*****, 17(4): 655-672.**

This article profiles the strategic surprise and intelligence failure literatures to derive ideas for reforms—including various means to improve the accuracy of intelligence such as alternative analysis or competitive analysis--that could improve the quality of intelligence analysis and possibly prevent future intelligence failures. It concludes: "The identification of causes of past failure leads to kernels of wisdom in the form of process modifications that could make the intelligence product more useful. A more effective, more accurate intelligence capability may still be vulnerable to the cognitive and institutional pathologies that cause failure, but a self-conscious and rigorous program based on the lessons derived from the existing literature would strengthen the intelligence product. This might lead to greater policymaker ability to respond to challenges, and thereby contribute to the national security of the United States."

**McIvor, Anthony D., ed. (2005).** ***Rethinking the Principles of War*****. Annapolis, MD: Naval Institute Press.**

Part Five – "Intelligence: Winning the Silent Wars" – contains the following chapters: Rethinking War and Intelligence, William M. Nolte; Beyond Intelligence Reform: The Case for a Revolution in Intelligence Affairs, Deborah G. Barger; The Weakest Link: Intelligence for Preemptive and Preventive Military Action, Richard L. Russell; Making the Case: Defense Counterintelligence as a Strategic Asset, Anthony D. McIvor; Does Intelligence Have a Future Tense?, Wesley K. Wark; Intelligence Transformation Past and Future: The Evolution of War and U.S. Intelligence, Michael Warner; Refocusing Intelligence: The Art of Analysis, Keith M. Masback.

**McLaughlin, John E. (1997). "New Challenges and Priorities for Analysis." *Defense Intelligence Journal,* 5(2): 11-21.**

Changes in the world around us and in the expectations of consumers "add up to a fundamental shift in the analytical priorities for CIA and others in the [Intelligence] Community.... Tapping into analytic expertise across the Community and coordinating on collection activity will be essential to overcome budget and personnel constraints." (Abstract from http://intellit.muskingum.edu/alpha_folder/D_folder/defij_analysis.html.)

**Medina, Carmen A. (2002). "What to Do When Traditional Models Fail: The Coming Revolution in Intelligence Analysis." *Studies in Intelligence* 46(3): 23-28.**

The great challenge facing analysts and managers in the DI is providing real insight to smart policymakers. Intelligence officers have long believed that careful attention to the tradecraft of intelligence analysis would lead to work that added value to the information available to policymakers. During its 50-plus years, the CIA evolved a model that needed only successful execution to produce quality intelligence analysis. When we faltered, we blamed the analysts, but not the model.

What if the failing, however, lies not with the analysts but with the model they are asked to follow? Customer needs and preferences are changing rapidly, as is the environment in which intelligence analysis operates. Yet the DI's approach to analysis has hardly changed over the years. Stability is often comforting, but in the DI's case change may be what is most needed. Analysts today must add value in an era of information overabundance, dig deep to surpass the analytic abilities of their customers, and reach beyond political analysis, an area in which it is particularly hard to provide value to policymakers (Medina).

**Mena, Jesús. (2003). *Investigative Data Mining for Security and Criminal Detection.* Burlington, MA: Elsevier Science.**

Investigative Data Mining for Security and Criminal Detection is the first book to outline how data mining technologies can be used to combat crime in the 21st century. It introduces security managers, law enforcement investigators, counter-intelligence agents, fraud specialists, and information security analysts to the latest data mining techniques and shows how they can be used as investigative tools. Readers will learn how to search public and private databases and networks to flag potential security threats and root out criminal activities even before they occur.

The groundbreaking book reviews the latest data mining technologies including intelligent agents, link analysis, text mining, decision trees, self-organizing maps,

machine learning, and neural networks. Using clear, understandable language, it explains the application of these technologies in such areas as computer and network security, fraud prevention, law enforcement, and national defense. International case studies throughout the book further illustrate how these technologies can be used to aid in crime prevention. Investigative Data Mining for Security and Criminal Detection will also serve as an indispensable resource for software developers and vendors as they design new products for the law enforcement and intelligence communities.

**Moore, David T., Lisa Krizan, and Elizabeth J. Moore. "Evaluating Intelligence: A Competency-Based Model."** ***International Journal of Intelligence and Counterintelligence*****, 18(2): 204-220.**

When strategic surprise confronts a nation, the accusation of intelligence failure often follows. The trigger is something dire: an attack on the nation's warships or mainland, the presence of nuclear missiles on a nearby island, the fall of a key ally in a volatile region, or an invasion of another ally by a regional bully. Conversely, only rarely do accolades give credit to intelligence for strategic success. Conventional excuses to protect sources and methods notwithstanding, this reflects a widespread lack of understanding of the factors that determine intelligence success. Yet, the interpretation of failure or success depends on accurately evaluating that unique form of knowledge provided to policy—and decisionmaking consumers—in other words, the evaluation of intelligence.

A competency-based model for defining analysis offers one means of evaluating intelligence. This model leads to both improved intelligence production—resulting in the products provided to intelligence consumers, and an improved intelligence process—the means by which that product is produced.

**Nance, Malcolm W. (2003).** ***The Terrorist Recognition Handbook*****. Guilford, CT: Lyons Press.**

Whether they are acting as a one-person cell, or with a sophisticated global finance and logistics network, terrorists can be members of nearly any race, sex, religion, or political persuasion. But every terrorist operation always has certain characteristics, and the only effective way to identify and prevent terrorists is to observe their behavior and analyze it with an intelligence-based approach. For the first time, a former U.S. military anti-terrorism intelligence officer reveals thousands of Terrorist Attack Pre-incident Indicators (TAPIs) in The Terrorist Recognition Handbook.

With dozens of incident case studies and hundreds of illustrations, The Terrorist Recognition Handbook is the first and only commercially available handbook that debunks the aura of mystery surrounding terrorist activities as it uncovers the terrorists' means, methods, organization, and motivations. It will be an invaluable resource and training guide for police officers, SWAT teams, federal officials,

security companies, local water boards, chemical plants, oil refineries, power generating facilities, electrical and telephone utilities, airport facilities, public transportation officials, education officials, journalists, and ordinary citizens.

**Nolte, William. "Keeping Pace with the Revolution in Intelligence Affairs."** ***Studies in Intelligence,*** **48/1: 1-9.**

The article observes that rapid changes in military and diplomatic spheres – embodied most prominently by the Revolution in Military Affairs – implies that a Revolution in Intelligence Affairs is imminent or already in progress. The intelligence community must embrace this concept, study its ramifications, and adapt to the new circumstances if it is to avoid failure or irrelevance. In this regard, the intelligence community needs to focus less on structure and more on behavior.

**O'Connell, Kevin and Robert Tomes. (2004). "Keeping the Information Edge."** ***Policy Review,*** **122: 19-38.**

Despite advances in information technology and knowledge management within the most visible area of national security — the military — America's overall commitment to preserving its information edge across the larger security bureaucracy foundered during the 1990s. To be sure, the situation is improving. Great strides in information sharing are being made. Yet we contend that despite significant initiatives to transform, government-wide information sharing innovations and intelligence-integration initiatives are evolving too slowly.

We believe that the coming year will witness an unparalleled national debate over the future of American intelligence. Attention at the official level will be necessary to effect change, but by itself it is insufficient. What will also be needed is a reasoned public debate about the purposes and dynamics of U.S. intelligence. The heated debate over the state of Iraqi weapons of mass destruction, charges that the intelligence cycle is being politicized, and a perceived lack of innovation in the integration of diverse intelligence sources are likely to amplify arguments over intelligence modernization.

All of these are appropriate considerations for an intelligence transformation debate, but they are not necessarily useful for organizing action. We believe that the appropriate research question for the policy community is not who in the U.S. government — intelligence agency, law enforcement entity, or other — failed to react to specific information about the individuals associated with the September 11 attacks. Rather, policymakers should be asking what levels of political, financial, and intellectual resources leaders and the public at large are willing to commit — and whether that commitment will last (O'Connell and Tomes).

**Odom, William E. (2003). *Fixing Intelligence: For a More Secure America*. New Haven, CT: Yale University Press.**

Security depends on intelligence. This is a discussion of basic problems in American intelligence and how to fix them, outlining fundamental restructuring of this vast network of agencies, technology and human agents. Odom's recommendations for revamping this essential component of American security are here available for general readers as well as for policymakers. While giving an overview of the world of US intelligence, Odom shows that the failure of American intelligence on 9/11 had much to do with the complex bureaucratic relationships existing among the various components of the Intelligence Community. The sustained fragmentation within the Intelligence Community since World War II is part of the story; the blurring of security and intelligence duties is another. Odom describes the various components of American intelligence in order to give readers an understanding of how complex they are and what can be done to make them more effective in providing timely intelligence and more efficient in using their large budgets. He shows definitively that they cannot be remedied with quick fixes but require deep study of the entire bureaucracy and the commitment of the US government to implement the necessary reforms (Synopsis from amazon.com).

**Ott, Marvin. (1994). "Shaking up the CIA." *Foreign Policy*, 93: 132.**

Examines concerns over the performance and integrity of the Directorate of Intelligence, the analytic arm of the Central Intelligence Agency. A highly capable, deeply flawed instrument of policy support; Director James Woolsey; Why the intelligence cognoscenti in the press and the congressional oversight committees have largely ignored the DI; Expected rise in importance of DI; Criteria for judging intelligence analysis; DI's three significant weaknesses; Primary tasks.

**Pappas, Aris A. and James Simon. (2002). "Daunting Challenges, Hard Decisions: The Intelligence Community: 2001 – 2015." *Studies in Intelligence*, 46(1).**

Over the past decade, commission upon commission has urged reform of the loose confederation that is the US Intelligence Community. Opposed by implacable champions of the status quo, precious few of these commissions have provoked meaningful change. Ten years after the end of the Cold War, the threat of a nuclear Armageddon has receded, but the collapse of world communism and its repercussions are still works in progress. In a world with only one remaining superpower, even small and materially poor states and groups can pose terrible threats.

This paper argues for a fundamental review and change in a strong and heavily traditional community of proud organizations. These organizations are challenged by attacks on what may be their most treasured measure of self-worth:

their relevancy. Intelligence must be shaped to reflect the world in which it lives. Success will not be measured by our ability to find marginally better ways to use our existing resources, but in our ability to seek out and employ whatever is needed to do the new job. Neither easy nor cheap, the costs and risks of doing anything else are simply unacceptable. When the world changes, the single most important requirement for intelligence is to change with it (Pappas and Simon).

**Peters, Katherina McIntire. (1996). "Intelligence Lost."** ***Government Executive,*** **28(11): 20.**

In the next 10 years, nearly half the agency's civilian employees could retire, taking with them their invaluable experience and knowledge accumulated over many years of service. Budget and personnel cuts, a revolution in technology, and the end of the Cold War have converged to force a major shift in the way DIA does business. At no time in the intelligence agency's 35-year history has it been required to do so much, so quickly-and in coming years, with so little depth of experience.

The trend alarms some Pentagon planners, especially as the field commanders in the shrinking military become more dependent on DIA for tactical intelligence. And while field commanders are becoming more reliant on DIA for intelligence, fewer employees of DIA have military experience. To provide the intelligence support the military community will need in the future, DIA will need more people with broad analytical skills and technological proficiency (Peters).

**Petersen, Martin. (2005). "Toward a Stronger Intelligence Product: Making the Analytic Review Process Work."** ***Studies in Intelligence (Unclassified Edition),*** **49(1).**

Like the tides, criticism of the analytic review process is predictable, relentless, eternal, and potentially destructive. Those who argue for more power to the drafter present a bill of particulars that alleges the process does little to improve the product, reduces judgments to the lowest common denominator, stifles creativity, and takes analysis out of the hands of the experts. Those who defend the review process counter that it sharpens focus, guarantees that the piece addresses policymaker concerns, taps all relevant expertise, and ensures a corporate product. Both sides agree on one thing—that there ought to be fewer layers of review—and both miss the key point.

**Posner, Richard A. (2005).** ***Preventing Surprise Attacks: Intelligence Reform in the Wake of 9/11.*** **Lanham, MD: Rowman & Littlefield.**

Richard A. Posner, in the first full-length study of the post-9/11 movement for intelligence reform, argues that the 9/11 Commission's analysis, on which Congress relied heavily in enacting the Intelligence Reform and Terrorism Prevention Act of 2004, was superficial and its organizational proposals unsound.

The Commission, followed by Congress, exaggerated the benefits of centralizing control over intelligence; neglected the relevant scholarship dealing with surprise attacks, organization theory, and the principles of intelligence, and the experience of foreign nations—some of which have a longer history of fighting terrorism than the United States; and as a result ignored the psychological, economic, historical, sociological, and comparative dimensions of the issue of intelligence reform.

Posner explains, however, that a ray of hope remains: The reorganization provisions of the new Intelligence Reform and Terrorism Prevention Act are so vague—as a result of intense politicking—that the actual shape of the reorganized system will depend critically on decisions made by the President in implementing the Act. In a searing critique, Posner exposes the pitfalls created by the new legislation, identifies the issues overlooked by the 9/11 Commission and Congress, and suggests directions for real reform. (Posner)

**Prados, John. (2004). "Intelligence: No Easy Fix."** ***Bulletin of the Atomic Scientists*****, 60(5): 17-19.**

A struggle by entrenched parties is likely to torpedo genuine intelligence community reform; the next CIA will not differ much from the old one.

**Quinn, Jr., James L. (2000). "Staffing the Intelligence Community: The Pros and Cons of an Intelligence Reserve." International** ***Journal of Intelligence and Counterintelligence*****, 13(2): 160-170.**

Considerable debate has taken place in recent years, both in Congress and within the Intelligence Community (IC), about the formation of a reserve component specifically designed for the IC. Responsible members of the IC and policymaking communities seem to be committed to the idea that there will be an intelligence reserve. According to Dr. Mark M. Lowenthal, a former staff director of the House Permanent Select Committee on Intelligence, ``This is something that's going to happen.'' But significant details remain to be worked out. While there was virtual unanimity - at least among those interviewed here - that some kind of civilian intelligence reserve would be established, wide disagreement existed on exactly what such a program might entail. The benefits and limitations of such a program, and an assessment of a variety of factors that would be critical to its implementation, including various suggestions as to the type of intelligence reserve that might be appropriate are examined here. The objective is not to recommend a specific policy, but rather to lay out options and arguments.

**Ramsbotham, David. (1995). "Analysis and Assessment for Peacekeeping Operations."** ***Intelligence and National Security*****, 10(3): 162-174.**

The aim of this essay is to examine the role of intelligence analysis and assessment in support of peacekeeping operations in a changing world.

Necessarily, this means the essay will focus on what [the author] perceive[s] to be the intelligence needs of the United Nations (UN), because its global responsibilities 'to maintain international peace and security' make it the primary 'employer' of peacekeeping forces. This essay will examine the intelligence needs of the three types of missions included under the generic term peacekeeping: preventative action, conflict resolution (whether traditional peacekeeping or peace enforcement), and post conflict reconstruction (or peace-building), each of which will be examined in turn.

**Rieber, Steven Rieber and Neil Thomason, "Creation of a National Institute for Analytic Methods," *Studies in Intelligence* 49/4: 71-77.**

The article cites evidence that the opinions of experts regarding the types of analytic methods that actually work may be misleading or seriously wrong. Accordingly, past practices of compiling best practices as a way to train future analysts might hamper rather than improve analysis. The authors argue for a systematic approach using rigorous scientific studies to determine what practices work and what doesn't in intelligence analysis.

**Rieber, Steven. (2004). "Intelligence Analysis and Judgmental Calibration." *International Journal of Intelligence & Counter Intelligence,* 17(1): 97-112.**

Evidence exists that experts in international affairs—including intelligence analysts—are poor at estimating the probability that a predicted outcome will occur. The probability judgments made by medical experts are equally poor: this indicates that rapid feedback about whether the outcome has occurred ("outcome feedback") is not sufficient to ensure good judgment about probabilities. What does seem to help is "calibration feedback," that is, data on how well one's subjective probability estimates correspond to the number of correct predictions. Calibration feedback should therefore be tested as a training technique for intelligence analysts, and intelligence analysts ought to be provided with on-the-job feedback about their own calibration. Making accurate probability judgments, a skill essential to intelligence analysis, is one that apparently can be improved. In addition to training and feedback, two other techniques might enhance this vital skill: one involves encouraging analysts to think in terms of frequencies instead of just percentage likelihoods, while the other stresses consideration of alternative reasons and hypotheses.

**Ronczkowski, Michael. (2004). *Terrorism and Organized Hate Crime: Intelligence Gathering, Analysis, and Investigations*. Boca Raton, FL: CRC Press.**

In response to the current terrorist threat, law enforcement agencies at every level have expanded technological and intelligence-gathering initiatives in order to support new tactical, investigative and deployment strategies. The demand for homeland security requires that agencies hire professional and specially trained criminal and intelligence analysts to find and pre-empt any potential threat.

Agencies must now determine how to train these analysts and properly identify and respond to critical intelligence. Terrorism and Organized Hate Crime: Intelligence Gathering, Analysis, and Investigations provides a framework for exploring the issues that all new or existing analysts and investigators must face, including what information to gather, how to analyze it, and the effectiveness of crime analysts investigating terrorism. Training in proactive analytical-based investigation has been around for less than thirty years. Events now mandate that unavoidable importance of understanding "terrorism analysis." This expert overview provides the crucial foundation of criminal intelligence gathering and analysis and defines the nature of terrorism and its practitioners, subjects of vital importance if local agencies are to play an effective role in the battle against terror (Synopsis from amazon.com).

**Rovner, Joshua, and Austin Long. (2005). "The Perils of Shallow Theory: Intelligence Reform and the 9/11 Commission."** ***International Journal of Intelligence and Counterintelligence,*** **18(4): 609-637.**

Despite its unique influence on the current reorganization of American intelligence, the National Commission on Terrorist Attacks on the United States (the 9/11 Commission) got it wrong. In examining the theories of failure presented by the Commission and assessing how closely its recommendations are linked to those theories, two principal arguments are here presented. First, the proposed reforms are mostly unrelated to the postulated causes of failure. Second, the theories are underdeveloped, contradictory, and basically unsatisfying on their own terms. For these reasons, large organizational reforms are unlikely to significantly improve intelligence performance.

**Russel, Kevin. (2004). "The Subjectivity of Intelligence Analysis and Implications for the U.S. National Security Strategy."** ***SAIS Review,*** **24(1): 147-163.**

The language used to describe intelligence estimates as objective reflections of available evidence has led in some cases to a misunderstanding of the role of intelligence in supporting the decision to go to war in Iraq. Saying that the estimate that identified the threats was either "right" or "wrong" ignores the probabilistic nature of intelligence assessments and the necessary subjective elements that make them useful to policymakers. By making this clear in the case of Iraq, we can separate the crucial question of how policy should be decided in the face of increased uncertainty and even more elusive enemies than have been faced in the past. Only then does it make sense to say how intelligence can be made more useful, leaving behind the misguided question of whether the intelligence community was right or wrong on Iraq.

**Samuelson, Douglas. (2005). "Agents of Change."** ***OR/MS Today,*** **32(1): pg. 26.**

Agent-based modeling (ABM) encompasses approaches and practitioners from operations research, artificial intelligence, social network theory, cognitive

science and other various disciplines. The basic idea is to expand traditional simulation to include entities whose behavior can change over time, depending on the circumstances they encounter. The field has grown explosively in numerous directions over the past 10 years, with important applications in war gaming, intelligence analysis, organizational performance, social policy and other areas. Many agent-based models now are complex enough, and deal with sufficiently sensitive issues, that validation becomes problematic. There may be a need to focus less on prediction and reliance on some physical reality external to the subject of interest, so there is a move away from traditional ideas of validation and toward credible use.

**Sangillo, Gregg and Siobhan Gorman. (2004). "Smarter Intelligence: A Post-9/11 Priority."** ***National Journal,*** **36(21): 1572-1579.**

This article profiles ten experts on intelligence reform, from both within and outside the U.S. Intelligence Community. The result is a collection of ideas on how to strengthen analysis, streamline production, and adapt to the global age of information.

**Scalingi, Paula L. (1995). "Proliferation and Arms Control."** ***Intelligence and National Security,*** **10(3): 150-161.**

Proliferation and arms control are not 'new' analytical priorities as such. Both have been among the more important intelligence responsibilities for years. Intelligence traditionally is responsible for monitoring compliance with arms control, nonproliferation and technology transfer agreements and for assessing current and prospective proliferation activities on a global basis.

What *is* new is the recognition that proliferation, along with increasing ethnic and nationalist strife is emerging as the foremost threat to international stability. Consequently, governments have been expanding the scope of their national security policy agendas in order better to deter, reduce, eliminate, or regulate the transfer of a wide range of weapons, equipment, related technologies, and materials. Because policy drives intelligence requirements, analysts whose 'accounts' focus on the proliferation threat or arms control support are facing an increasing array of challenges – at a time when many countries are cutting defense and intelligence resources due to budgetary constraints.

Such a world is not far in the future. Electronic dissemination will fundamentally change the relationship between the intelligence analysts and his or her customer, whether that customer is a military commander or a civilian policy-maker; moreover, in doing so electronic dissemination will bring significant changes in the ways in which intelligence analysts work.

**Schrage, Michael. (2005, February 20). "What Percent Is 'Slam Dunk'?; Give Us Odds on Those Estimates."** ***Washington Post,*** **p. B01**

The controversial decision to reorganize America's sprawling intelligence establishment has set in motion the most sweeping bureaucratic change for sensors, spies and satellites since the end of World War II. Unfortunately, the odds are excellent that this multibillion dollar structural shuffle -- capped last week by the appointment of veteran diplomat John Negroponte as the new national intelligence director -- will do little to improve the quality of intelligence analysis for this country.

Why? Because America's intelligence community doesn't like odds. Yet the simplest and most cost-effective innovation that community could adopt would be to embrace them. It's time to require national security analysts to assign numerical probabilities to their professional estimates and assessments as both a matter of rigor and of record. Policymakers can't weigh the risks associated with their decisions if they can't see how confident analysts are in the evidence and conclusions used to justify those decisions. The notion of imposing intelligence accountability without intelligent counting -- without numbers -- is a fool's errand.

**Segell, Glen M. "Intelligence Methodologies Applicable to the Madrid Train Bombings, 2004."** ***International Journal of Intelligence and Counterintelligence,*** **18(2): 221-238.**

An inherent difficulty facing intelligence agencies led to the inability to prevent the al-Qaeda Madrid commuter train bombing on 11 March 2004—exactly 911 days after the 11 September 2001 (9/11) al-Qaeda attacks in the United States. Intelligence analysts can be 100 percent accurate on future events only if the information is 100 percent specific and certain. In general, the intelligence agency data gatherers and analysts face severe limitations, given that their mandate is not to be historians in describing the past but rather to be accurate in both forecasting and predicting the future. To be sure, there are few good sources of data on events yet to happen, as is the dilemma where too many variables exist. This is the essential difference between ad hoc intelligence gathering and analysis and specific actionable intelligence gathering and analysis.

Given this, three potential methodologies are available in ad hoc intelligence gathering and analysis, inferred and referred to in seminal literature, to predict and forecast an act or event that has not been clearly identified These are: (1) trends and patterns, (2) frequency, and (3) probability. The three methodologies are broad in conceptualization, given that at any given stage the emphasis may be on one or more or, indeed, that all three may be utilized simultaneously.

**Sharfman, Peter. (1995). "Intelligence Analysis in an Age of Electronic Dissemination."** ***Intelligence and National Security*****, 10(3): 201-211.**

Imagine a world in which the technologies and the concepts of the Internet were applied to the transmission of intelligence from the 'producer' to the user, whether that user is a policy-maker in the capital or a military commander in the field. Intelligence agencies would create electronic databases into which their products would be entered. Users would search these databases for intelligence relevant to their concerns, and then download this intelligence on to the users' own computer, where it could be combined as desired with other intelligence products drawn from other databases on the same network.

**Sims, Jennifer E and Burton Gerber. (2005).** ***Transforming U.S. Intelligence*****. Washington, DC: Georgetown University Press.**

*Transforming U.S. Intelligence* supports the mandate of the new director of national intelligence by offering both careful analysis of existing strengths and weaknesses in U.S. intelligence and specific recommendations on how to fix its problems without harming its strengths. These recommendations, based on intimate knowledge of the way U.S. intelligence actually works, include suggestions for the creative mixing of technologies with new missions to bring about the transformation of U.S. intelligence without incurring unnecessary harm or expense. The goal is the creation of an intelligence community that can rapidly respond to developments in international politics, such as the emergence of nimble terrorist networks while reconciling national security requirements with the rights and liberties of American citizens. (Sims & Gerber)

**Sloan, Stephen. (2002). "Meeting the Terrorist Threat: The Localization of Counter Terrorism Intelligence."** ***Police Practice and Research*****, 3(4): 337-345.**

It has long been recognized that intelligence is at the heart of countering terrorism. It is vital that intelligence capabilities are refined and extended beyond the national intelligence community since ultimately the state and local authorities must be involved in identifying, analyzing, and responding to threats, acts, etc. By achieving the necessary integration between all levels of government, the U.S. can more effectively develop measures and defense against terrorism (Sloan).

**Stack, Kevin P. (1998). "Competitive Intelligence."** ***Intelligence and National Security*****, 13(4): 194-202.**

In 1976, the Intelligence Community experimented with a "Team B" approach to competitive intelligence, where a group of outside Soviet experts examined the same intelligence as the CIA's Directorate of Intelligence, yet produced drastically different conclusions regarding the Soviet Union's capabilities and intensions. Even though the experiment ultimately ended in a polarized debate

between extremists and has been dubbed a failure ever since, proposals for Team B exercises in national intelligence products have resurfaced in recent years. While advocates of this approach argue that policymakers would benefit from this type of dual analysis, the author argues that the expanding role of Open Source intelligence, the existence of overlapping analytical agencies, and the time constraints of policymakers would contribute to a repeat failure of Team B exercises.

**Steele, Robert David. (1995). "Private Enterprise Intelligence: Its Potential Contribution to National Security."** ***Intelligence and National Security*****, 10(3): 212-228.**

Open Source intelligence has maintained a modest role within the larger intelligence communities, and a more central role within the smaller intelligence communities, but the reality is that the Anglo-Saxon intelligence communities of today exploit less than 10 percent of what is available from the private sector. The aim of this essay is to explore the larger strategic context within which private enterprise intelligence can make a contribution to national security; to understand operational concepts from private enterprise intelligence which can and should be adopted by the traditional government intelligence services; and finally, to make an inventory of some of the specific private enterprise intelligence capabilities which can be used by the government to achieve both tactical results and sustained savings.

**Steinberg, James, Mary Graham, and Andrew Eggers. (2003). "Building Intelligence to Fight Terrorism." Brookings Institution Policy Brief 125.**

Policymakers must go further to build a new intelligence system to support transformed national security needs. Even if they are careful in defining a new structure for gathering, analyzing, and disseminating national security information, they cannot avoid difficult questions about how to improve security while furthering openness and protecting personal privacy. Vigorous public debate is essential to answering these questions. Clear guidelines, formulated in a deliberative process, can assure public confidence in new policies. Information technology can provide tools to minimize these conflicts, foster collaboration, and help assure that the right information gets to the right people at the right time. Nonetheless, missteps are inevitable. Procedures that provide accountability and oversight can assure that lessons from early experiences strengthen the nation's information strategies to fight terrorism (Steinberg, Graham and Eggers).

***"Strategic Investment Plan for Intelligence Community Analysis."*** **[Electronic Resource]. Washington, DC: Central Intelligence Agency, 2001. Accessible at http://purl.access.gpo.gov/GPO/LPS16241L.**

This *Strategic Investment Plan for Intelligence Community Analysis* (SIP) provides the analytic community with the unprecedented opportunity to achieve

the unifying goals of the DCI's *Strategic Intent* and to translate today's challenges into tomorrow's resource requirements. The historic willingness to begin planning our future together stems, in part, from the growing perception that collaboration is the best way to achieve common goals for: a skilled, expert, diverse and more mobile work force enabled by technology and armed with the best analytic tools; a collection-smart work force that is trained and deployed and has the resources to assist collectors with requirements, evaluation, and procurement; a collaborative work force that leverages the production of each agency to provide the best Community support to customers; and an outward-looking work force that systematically exploits the information and expertise of sources beyond the Intelligence Community to produce the most authoritative strategic and current analysis possible (Strategic Investment Plan).

**Swaka, Ken. (2004). "Strategic Intelligence: An Oxymoron."** ***Competitive Intelligence Magazine,*** **7(1): 14.**

A few exceptional companies aside, competitive intelligence for the most part has not achieved a degree of sophistication that would enable it to play a regular role in strategic planning and development. Intelligence analysis - the foundation for strategic intelligence - has suffered from a general failure of analysts to apply analytic methodologies, develop true insights, and present their conclusions with the confidence necessary to gain management's ear. For managers, the benefits of tactical intelligence are easier to measure. Truth be told, most Competitive Intelligence practitioners don't have the choice of being tactical or strategic - they need to do both. Emphasis needs to be placed on the area, which can provide the most unique value. How do you set the right emphasis? First, determine how your company sets strategy. Next, conduct a self-assessment. Then, evaluate how you relate to strategic management. Finally, determine how your efforts are measured.

**Swensen, Russell, ed. (2003).** ***Bringing Intelligence About: Practitioners Reflect on Best Practices.*** **Washington, DC: Joint Military Intelligence College, Center for Strategic Intelligence Research.**

Foreword by Mark Lowenthal. Chapters include: The Intelligence Pro and the Professor: Toward an Alchemy of Applied Arts and Sciences, by Pauletta Otis; Via the Internet, by John Turner; Visit to Mazagon Dockyard, Bombay, by F.G. Satterthwaite; Improving CIA Analysis by Overcoming Institutional Obstacles, by Stephen Marrin; Appraising Best Practices in Defense Intelligence Analysis, by Thomas A. Garin; Core Competencies for Intelligence Analysis at the National Security Agency, by David T. Moore and Lisa Krizan; and The U.S. Coast Guard Joins the Intelligence Community, by Michael E. Bennett.

**Teitelbaum, Lorne. (2005).** ***The Impact of the Information Revolution on Policymakers' use of Intelligence Analysis.*** **Santa Monica, CA: RAND Corporation.**

This dissertation compares how policymakers have traditionally used intelligence with how they are using it today, examining the effects that new technology and open sources of information, such as the World Wide Web, are having on how the policy community uses intelligence. The author examines three foreign policy cases from the late 1950s and early 1960s to establish how the traditional intelligence-policy relationship evolved. He then describes three modern foreign policy cases and analyzes how policymakers' use of intelligence to support the policymaking process has changed. He concludes that the intelligence community has tried to adapt to the information revolution with the adoption of a network named Intelink but has not fully supported this network as a means for disseminating intelligence to policymakers, nor have policymakers adopted it. Internet and web-based sources of analysis have not become major contributors to the policymaking process. Overall, policymakers still find intelligence analysis useful for supporting the policymaking process, especially when it is conveyed through a one-on-one intelligence briefing, but for situations that require the most timely information, policymakers often rely on the telephone to call someone for information, and more and more are relying on CNN.

**Treverton, Gregory F. (2005).** ***The Next Steps in Reshaping intelligence.*** **Santa Monica, CA: RAND Corporation.**

Two national commissions' findings helped to lay the groundwork for the December 2004 intelligence reorganization bill. Most notably, the bill calls for a new Director of National Intelligence (DNI) to head and coordinate the U.S. Intelligence Community. Currently, the DNI has broad responsibilities but only ambiguous authorities. Drawing on a number of projects for various intelligence agencies, as well as additional research, the author of this paper looks at this position of DNI and how it will interact and coordinate with intelligence agencies and other elements of the Executive Branch. In addition to organizational changes, the author looks at the cultural changes that need to take place in the community, including those related to capacity building, issue-based collection, analysis improvement, wider diversity of workforce, and targeting collection. In particular, the paper highlights the importance of moving toward center-based organizations and away from the "stovepipes" of the Cold War. In accomplishing such goals, the DNI will begin to turn his formal authority into real authority.

**Treverton, Gregory F. (2003). Intelligence: The Achilles Heel of the Bush Doctrine.** ***Arms Control Today,*** **33(6).**

Highlights the incompetence of the U.S. intelligence to locate and preemptively target weapons of mass destruction, as of September 2003. Strategy of the administration of President Bush in making its case for war against Iraq, technical

innovations in intelligence that may help identify suspicious facilities, and limitations of the national strategy of the country.

**Treverton, Gregory F. (2001). *Reshaping National Intelligence in an Age of Information.* New York, NY: Cambridge University Press.**

The world of intelligence has been completely transformed by the end of the Cold War and the onset of an age of information. Prior to the 1990s, US government intelligence had one principal target, [but] today, world intelligence has many targets, numerous consumers, and too much information, most of which is not owned by the U.S. government and is of widely varying reliability. In this bold and penetrating study, Gregory Treverton offers his insider's views on how intelligence gathering and analysis must change. He suggests why intelligence needs to be both contrarian, leaning against the conventional wisdom, and attentive to the longer term, leaning against the growing shorter time horizons of Washington policy makers. He urges that the solving of intelligence puzzles tap expertise outside government - in the academy, think tanks, and Wall Street - to make these parties colleagues and co-consumers of intelligence, befitting the changed role of government from doer to convener, mediator, and coalition-builder (www.amazon.com).

**Turner, Michael A. (2005). *Why Secret Intelligence Fails.* Dulles, VA: Potomac Books.**

Michael Turner argues that the root causes of failures in American intelligence can be found in the way it is organized and in the intelligence process itself. Intelligence that has gone awry affects national decision making and, ultimately, American national security. Intelligence officials are reluctant to talk about intelligence successes, claiming "the secret of our success is the secret of our success." But these officials also shy away from talking about failures, largely because doing so would expose the failings of American intelligence and have an impact on policy consumers who may become more reluctant to accept and act on the intelligence they receive.

Rather than focusing on case studies, the book takes a holistic approach, beginning with structural issues and all dysfunctions that emanate from them. Turner explores each step of the intelligence cycle—priority setting, intelligence collection, analysis, production, and dissemination—to identify the "inflection points" within each stage that contribute to intelligence failures. Finally, he examines a variety of plans that, if implemented, would reduce the likelihood of intelligence failures.

While examining the causes of intelligence failures, Turner also explores intelligence as a critical governmental activity, making the book an excellent primer on secret intelligence. Turner writes in jargon-free prose for the informed reader interested in foreign policy and national security policy matters and brings

enough depth to his subject that even experts will find this a must-read. (Synopsis from Amazon.com)

**United States. Aspin-Brown Commission, *Preparing for the 21st Century*. Washington, DC: U.S. Government Printing Office (1996).**

The Report of the Aspin/Brown Commission made a number of recommendations regarding the organization of the Intelligence Community. Structural changes in the NSC staff were proposed to enhance the guidance provided to intelligence agencies. Global crime — terrorism, international drug trafficking, proliferation of weapons of mass destruction, and international organized crime — was given special attention with recommendations for an NSC Committee on Global Crime. The Commission also recommended designating the Attorney General to coordinate the "nation's law enforcement response to global crime," and clarifying the authority of intelligence agencies to collect information concerning foreign persons abroad for law enforcement purposes. It urged that the sharing of relevant information between the law enforcement and intelligence communities be expanded, and their activities overseas be better coordinated. (Congressional Research Service)

**United States. (2004). *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States.* New York, NY: W. W. Norton & Co.**

The result of months of intensive investigations and inquiries by a specially appointed bipartisan panel, The 9/11 Commission Report is one of the most important historical documents of the modern era. And while that fact alone makes it worth owning, it is also a chilling and valuable piece of nonfiction: a comprehensive and alarming look at one of the biggest intelligence failures in history and the events that led up to it. The commission traces the roots of al-Qaeda's strategies along with the emergence of the 19 hijackers and how they entered the United States and boarded airplanes. It details the missed opportunities of law enforcement officials to avert disaster. Using transcripts of cockpit voice recordings, the report describes events on board the planes along with the chaotic reaction on the ground from nearly every level of government. Going forward, the commission calls for a comprehensive overhaul of what it sees as a deeply flawed and disjointed intelligence-gathering operation. The creation of a post for a single National Security Director is recommended, along with the creation of a National Counterterrorism Center. The report finds fault with the approaches of both the Clinton and Bush administrations but, because they were a bipartisan panel and the problems described are so systemic and far-reaching, they stop short of assigning blame to any particular person or group. Credit must be given to how readable the report is. At more than 500 pages, the writing is clear and forceful and the information is made more accessible since it is free from election politics and rancor. While the commission notes that future attacks are probably inevitable, a coordinated preventive effort along with a clear plan to

respond with efficiency can offer Americans some hope in a post-9/11 world. (Synopsis from Amazon.com)

**United States. General Accounting Office. Defense Acquisitions: Steps Needed to Ensure Interoperability of Systems That Process Intelligence Data. Report to the Chairman, Committee on Armed Services, House of Representatives. Washington, DC: GAO, 2003.**

Making sure systems can work effectively together (interoperability) has been a key problem for the Department of Defense (DOD) yet integral to its goals for enhancing joint operations. Given the importance of being able to share intelligence data quickly, [the GAO] assessed DOD's initiative to develop a common ground-surface-based intelligence system and to particularly examine (1) whether DOD has adequately planned this initiative and (2) whether its process for testing and certifying the interoperability of new systems is working effectively.

GAO recommends that DOD enhance its planning to include a detailed migration plan and schedule. GAO also recommends that DOD take steps needed to enforce its process and determine why the services are slow to certify systems in order that it can implement controls and incentives needed to spur compliance. DOD generally agreed with GAO recommendations (GAO).

**U.S. Senate. *Report on the U.S. Intelligence Community's Prewar Intelligence Assessments on Iraq.* S. Rpt. 108-301, 108th Cong., 2nd Sess., June 2004.**

The Senate Select Committee on Intelligence's Report on the U.S. Intelligence Community's Prewar Assessments on Iraq is intended to provide the Senate and the American public with a substantial record of the facts underlying the conclusions of the Committee regarding the intelligence community's prewar assessments of Iraq's programs for weapons of mass destruction and its ties to terrorism.

**Waltz, Edward. (2003). *Knowledge Management in the Intelligence Enterprise*. Norwood, MA: Artech House.**

Written for professionals who are responsible for the management of an intelligence enterprise operation in either the military or corporate setting, this is the first easy-to-understand, system-level book that specifically applies knowledge management principles, practices and technologies to the intelligence domain.

**Watanabe, Frank. (1997). "Fifteen Axioms for Intelligence Analysts: How to Succeed in the DI."** ***Studies in Intelligence (Unclassified Edition),*** **No. 1.**

From the Author: Before leaving the DI on a rotational assignment, I endeavored to set down some of the axioms by which I have tried to live in my career. Initially, this exercise was begun to provide some practical advice to a new analyst joining my branch, but I eventually decided that these axioms might be of interest to officers throughout the DI. Although I have not rigidly adhered to them, they have served me well as general guides to professional conduct as a DI analyst. To experienced analysts, many of the principles will sound like truisms and, if that is the case, all the better. I just tried to codify general rules that guide what we in the DI do on a daily basis, and I would not presume to invent new tradecraft. But the new DI analyst, and more than a few old hands, would be well served by remembering these 15 principles in their everyday conduct, as I suspect that many will never be adopted officially.

**Ward, Steven. (2002). "Counterpoint to 'The Coming Revolution in Intelligence Analysis': Evolution Beats Revolution in Analysis."** ***Studies in Intelligence,*** **46(3): 29-36.**

At its heart, "The Coming Revolution in Intelligence Analysis" is criticizing the DI's office-based culture. Many would argue that the problem is that the current model for analysis has not been applied consistently across the Directorate. Many of the shortcomings that Medina lists are the result of this uneven application and the failure to solidify the corporate foundation of basic tradecraft skills. Successful change in any organization requires either a dramatic and widely accepted shift in basic principles or years of sustained attention to shaping processes and values. In both cases, senior leadership needs to demonstrate what it truly values by using the full gamut of its abilities to promote and reward the desired behaviors.

Rather than trying to jumpstart the process of altering the Directorate's office-based culture with another round of disruptive changes, the DI would be better served by continuing to seek improvements at the margins. Some Issue Groups and Teams have shown that it is possible to achieve an optimal balance between the attention they pay to current developments and customer service, between building analysts' skills and providing timely and valuable responses to policymakers, and between maintaining their analytic integrity and tailoring support to meet policymakers' needs. In short, we know what needs to be done and how to do it. The challenge is for our senior leadership to show through its actions that to achieve the most ambitious goals of responsiveness and relevance across the Directorate it will enforce a high corporate tradecraft standard and solidify our foundation of analytic and managerial skills through training, opportunity, and accountability.