Steele, Robert David (2000). *ON INTELLIGENCE: Spies and Secrecy in an Open World.* Fairfax, VA: Armed Forces Communications and Electronics Association.

Annotated Bibliography

Information, Crime, Risk, and Hackers
Information, Economy
Information, Environmental
Information, Geospatial and Visualization
Information, Internet and Silicon Valley
Information, Productivity & Politics
Information, Strategic Perspectives
Information, Tactical Methods
Information, Warfare (Cyberwar)

Intelligence
Intelligence, Analysis
Intelligence, Business and Competitive
Intelligence, Coalition and Peacekeeping
Intelligence, Collection
Intelligence, Counter
Intelligence, Covert Action and Paramilitary
Intelligence, Economic Espionage
Intelligence, Foreign Capabilities
Intelligence, Law Enforcement
Intelligence, Military
Intelligence, Policy
Intelligence, Reference
Intelligence, Reform and Future

Management, Acquisition
Management, Future
Management, Leadership
Management, Organizational

Not listed, but relevant to the larger intellectual architecture that needs to be applied to national intelligence, are a broad range of books on 21st Century competitiveness between nations, educational reform, management of the trillion-dollar economy, crime and punishment, and the realities of Presidential and Congressional politics. I hope my comments add value to this limited but interesting collection of books.

Information, Crime, Risk, and Hackers

Hafner, Katie and John Markoff, *CYBERPUNK: Outlaws and Hackers on the Computer Frontier* (Simon & Schuster ,1991).

Three case studies are provided, including one dealing with Robert Morris, son of a distinguished NSA scientist and the person who brought America to a standstill with an epidemic electronic virus. By two distinguished journalists who knew little about hackers but could recognize a great story when they saw one, this is one of the more important early books that erroneously labeled hackers as criminals and electronic criminals as hackers.

Icove, David, Karl Sager, and William VonStorch, *Computer Crime: A Crimefighter's Handbook* (O'Reilly & Associates, 1995).

This is a proper book on preventing, recognizing, and addressing computer crime. It gets high marks from Jim Settle, the top FBI authority on computer crime until his retirement, and now an international consultant in this area.

Levy, Steven, *HACKERS: Heroes of the Computer Revolution* (Dell, 1984).

This is the definitive book on the early hackers, true hackers, and should be required reading for all those people, generally with good intentions, that ignorantly refer to electronic criminals and vandals as "hackers". Steven starts his book with a "who's who" in hacking that includes Lee Felsenstein from Interval, Bill Gates, Steven Jobs, and Woz Woniak, among others, and then goes on in three parts to examine the original night hackers at MIT and other nodes of excellence, then the hardware hackers, and finally the game hackers. *Hackers are a national resource*, and it is only the ignorant who do not understand this.

Neumann, Peter G., *Computer Related Risks* (Addison-Wesley, 1995).

Neumann, founder and moderator of the Internet Risk Forum, is the pope of the legitimate computer risks community. This is the bible.

Slatalla, Michelle and Joshua Quittner, *Masters of Deception: The Gang that Rules Cyberspace* (HarperCollins, 1995).

This is a fun read, but as with the Hafner and Markoff book, reader beware. Erik Bloodaxe, one of the major characters in the book and my friend as well as a trusted security engineer, inscribed this book as follows: "Robert, Hope you enjoy this classic example of 3rd rate speculative fiction. So much for journalistic integrity, eh? /s/. I also

know Phiber Optic, and tried to keep him out of jail, even offered to house him and hire him on parole, but to no avail. This is a good story that crosses over frequently into speculative reporting, but it may be better for that, capturing some of the spirit of competition that exists between very talented hackers who by and large do no harm.

Sterling, Bruce, *The Hacker Crackdown: Law and Disorder on the Electronic Frontier* (Bantam, 1992).

This is one of three books I trust on hackers and hacking (Levy and Turkle are the other two trusted authors). Bruce, a very distinguished author in *WIRED* and science fiction circles, went to great lengths to investigate and understand what was happening between hackers exploring corporate systems, corporate security officials that were clueless and seeking scorched earth revenge, and Secret Service investigators that were equally clueless and willing to testify erroneously to judges that the hackers had caused grave damage to national security. Bruce is a true investigative journalist with a deep understanding of both technical and cultural matters, and I consider him superior to anyone in government on the facts of the matter.

Stoll, Clifford, *The Cuckoo's Egg: Tracking a Spy Through the Maze of Computer Espionage* (Doubleday, 1989).

This is an absolutely *riveting* story of how a brilliant physicist, assigned as an initiation rite to track down the reason for a 75 cent error in the computer accounts of the Lawrence Berkeley Laboratory, ultimately identified and nailed an East German electronic espionage specialist. In passing, he outlines with great preciseness the insecurity of the entire U.S. government, military, law enforcement, business, and academic electronic communications and computing network, and reveals the total fragmentation as well as the general ignorance of almost all of the US and international organizations associated with these networks.

Turkle, Sherry, *The Second Self: Computer and the Human Spirit* (Simon & Schuster, 1984).

This is "the" book that described the true origin of "hacking" as in "pushing the edge of the envelope" by writing a complex program in six lines of code instead of ten. This is a really superior piece of work about computer cultures and the people that belong to them. It is a wonderfully readable book with magnificent insights into the psychology of the young people at the bleeding edge of the computer frontier.

Information, Economy

Kelly, Kevin, *New Rules for the New Economy: 10 Radical Strategies for a Connected World* (Viking, 1998).

Building on a series of article for *WIRED* Magazine, Kevin explains ten rules for the new Internet-based economy that make more and more sense as time goes on. From "follow the free" to "feed the web first" and on to "from places to spaces" and "relationship technology", his insights provide an easy to understand map of where the digital economy is going.

Tapscott, Don, *The Digital Economy: Promise and Peril in the Age of Networked Intelligence* (McGraw-Hill, 1996).

After demolishing Business Process Reengineering (BPR) as a necessary element of but insufficient substitute for corporate strategy, organizational learning, or reinvention, the author goes on to address twelve themes central to success in an economic environment characterized by networked intelligence: knowledge, digitization, virtualization, molecularization, integration/internetworking, disintermediation, convergence (a big one), innovation, prosumption, immediacy, globalization, and discordance (another big one). He stressed the need for "busting loose from the technology legacy", the need to dramatically transform both the information management and human resource management concepts and also a turning on its head of how government works—from centralized after the fact "leveling" and gross national security to decentralized, proactive nurturing of individual opportunity before the fact, providing individual security through individual opportunity and prosperity within the network.

Information, Environmental

There is a vast range of literature out there that needs to be brought into the all-source analysis arena. I will list just three representative examples without review. It is clear to me that Lester R. Brown and the Worldwatch Institute should be our *primary* national intelligence node for environmental intelligence, augmented by other nodes around the world, and with very selective classified intelligence support where necessary to detect clandestine and illegal environmental activities that have continental and international repercussions—such as toxic dumping in Africa.

Brown, Lester R., *Tough Choices: Facing the Challenge of Food Scarcity* (W.W. Norton, 1996).

Brown, Lester R., et al., *State of the World: A Worldwatch Institute Report on Progress Toward a Sustainable Society* (W. W. Norton, 1999).

Brown, Lester R., Hal Kane, and Ed Ayres, *VITAL SIGNS 1993: The Trends That Are Shaping Our Future* (W. W. Norton, 1993).

Information, Geospatial and Visualization

These books require no review. They are representative of an entire range of intelligence products that do not exist, and of an entire range of techniques for presenting compelling intelligence that the U.S. Intelligence Community has not yet grasped. These are just the ones I had time to buy and read. There are a number of others now that reflect the enormous progress made in automated geospatial and time data visualization in the late 1990's.

Chaliand, Gerard and Jean-Pierre Rageau, *Strategic Atlas: A Comparative Geopolitics of the World's Powers* (Harper & Row, 1990).

Keegan, John and Andrew Wheatcroft, *Zones of Conflict: An Atlas of Future Wars* (Simon & Schuster, 1986).

Kidron, Michael and Ronald Segal, *The State of the World Atlas* (Simon & Schuster, 1981).

Kidron, Michael and Ronald Segal, *The New State of the World Atlas* (Simon & Schuster, 1991).

Smith, Dan, *The State of War and Peace Atlas* (Penguin, 1997).

Tufte, Edward R., *The Visual Display of Quantitative Information* (Graphics Press, 1983).

Tufte, Edward R., *Envisioning Information* (Graphics Press, 1990).

Tufte, Edward R., *Visual Explanations: Images and Quantities, Evidence and Narrative* (Graphics Press, 1997).

Information, Internet and Silicon Valley

Cringely, Robert X, *Accidental Empires: How the Boys of Silicon Valley Make Their Millions, Battle Foreign Competition, and Still Can't Get a Date* (Addison Wesley, 1992).

A gift from one of the folks he writes about, this is one of the earliest books about Silicon Valley, and is both enjoyable and useful because of its early focus on the mistakes made by IBM, Xerox Park, 3Com, and other "CIA-like" giants, its discussion of the hit and miss and perserverence nature of the early start-ups, and some really big things to avoid like letting venture capitalists or the marketing staff tell you what to offer the public.

Downes, Larry and Chunka Mui, *Unleashing the KILLER APP: Digital Strategies for Market Dominance* (Harvard, 1998).

Twelve principles of killer app design: 1) Outsource to the customer, 2) Cannibalize your markets; 3) Treat each customer as a market segment of one; 4) Create communities of value; 5) Replace rude interfaces with learning interfaces; 6) Ensure continuity for the customer, not yourself; 7) Give away as much information as you can; 8) Structure every transaction as a joint venture; 9) Treat your assets as liabilities; 10) Destroy your value chain; 11) Manage innovation as a portfolio of options; 12) Hire the children.

Evans, Philip and Thomas S. Wurster, *Blown to Bits: How the New Economics of Information Transforms Society* (Harvard, 2000).

Navigation, not content, will rule. Navigators will compete based on reach, affiliation, and richness. Privacy will be a mandated aspect of every offering. Traditional organizations and bureaucracies are unlikely to survive because there is no one there willing and able to "deconstruct" them down to core functionalities and then rebuild them back up with a focus on customer service as the driving force rather than assembly of whatever it was they used to understand as the primary organizing principle.

Gates, Bill, *Business @ The Speed of Thought: Using a Digital Nervous System* (Warner Books, 1999).

No doubt largely written by staff assistants, this book can be considered a watered-down version of Microsoft's game plan for taking over the world, i.e. being the operating system for everything. Each chapter has a useful figure that sums up business lessons and methods for diagnosing one of the aspect's of one's digital nervous system. This is a great airplane book.

Hagel, John III and Arthur G. Armstrong, *net.gain: expanding markets through virtual communities* (Harvard, 1997).

This is a very serious handbook for how to create communities of interest, provide value that keeps the members there, and establish a foundation for growing exponentially from day one.

Lewis, Michael, *The NEW NEW Thing: A Silicon Valley Story* (Norton, 2000).

Great airplane book. The story of Jim Clarke, the only man to have created three billion-dollar ventures—Netscape, Silicon Graphics, and Healtheon. Documents the shifting of power from Wall Street to Silicon Valley, and offers some wonderful insights into the culture. Does not, by virtue of focusing on the one really big success story out of the Valley, begin to address the human waste and carnage from all the failed start-ups.

McKenna, Regis, *REAL TIME: Preparing for the Age of the Never Satisfied Customer* (Harvard, 1997).

This may be one of the top three books I've read in the last couple of years. It is simply packed with insights that are applicable to both the classified intelligence community as well as the larger national information community. The following is a tiny taste from this very deep pool: "Instead of fruitlessly trying to predict the future course of a competitive or market trend, customer behavior or demand, managers should be trying to find and deploy all the tools that will enable them, in some sense, to be ever-present, ever-vigilant, and ever-ready in the brave new marketplace in gestation, where information and knowledge are ceaselessly exchanged."

Rheingold, Howard, *Tools for Thought: The History and Future of Mind-Expanding Technology* (Simon & Schuster, 1985).

Howard, who wears hand-painted cowboy boots and was at the time the long-serving editor of *The Whole Earth Review*, came to my attention through this book, which is an excellent primer for thinking about how technology can impact on thinking.

Rheingold, Howard, *The Virtual Community: Homesteading on the Electronic Frontier* (Addison-Wesley, 1993).

Coming after his book on Virtual Reality, this book solidified in my own mind all of the concepts necessary to implement a "virtual intelligence community."

Rheingold, Howard, *VIRTUAL REALITY* (Summit, 1991).

Howard's second major book is valuable primarily because it begins to explore the issues associated with the integration of humans, machines, and software, and how humans, business, and society in general might be transformed.

Stoll, Clifford, *Silicon Snake Oil: Second Thoughts on the Information Highway* (Doubleday, 1995).

"Our networks are awash in data. A little of it's information. A smidgen of this shows up as knowledge....The Internet, that great digital dumpster, confers not power, not prosperity, not perspicacity...Our networks can be frustrating, expensive, unreliable connections that get in the way of useful work. It is an overpromoted hollow world, devoid of warmth and human kindness. The heavily promoted information infrastructure addresses few social needs or business concerns. At the same time, it directly threatens precious parts of our society, including schools, libraries, and social institutions."

Information, Productivity & Politics

Strassmann, Paul, *The Business Value of Computers: An Executive's Guide* (Information Economics Press, 1990).

Way over my head, I would not have appreciated this book if Paul had not first given a brilliant lecture at OSS '96, the keynote presentation, on "Knowledge Capital™" and how to calculate information costs against their actual contributions to corporate profit. In general, one should buy this book to be persuaded of Paul's brilliance, and then hire him to implement the ideas as a strategic consultant. Not for the weak-minded CEO or CIO, as it impales most corporate oxes and concludes that in general, there has been either a negative return on investment, or no discernible contribution to corporate profit, from steadily increasing information technology budgets.

Strassmann, Paul, *Information PayOff: The Transformation of Work in the Electronic Age* (Free Press, 1985).

Paul, former Chief Information Officer for Xerox and later Director of Defense Information, used this book to address the basic issues of employee productivity in relation to information technology. This is one of a very few books, including those by Carkhuff, Cleveland, Kelly, and Toffler, that I regard as fundamental—required reading for anyone with any authority over anything.

Strassmann, Paul, *Information Productivity: Assessing the Information Management Costs of US Industrial Corporations* (Information Economics Press, 1999).

Paul documents the fact that "a very large share of U.S. industrial firms are not productive in terms that apply to the information age." He evaluates and ranks 1,586 firms, and the results are both surprising and valuable.

Strassmann, Paul, *The Politics of Information Management: Policy Guidelines* (Information Economics Press, 1995).

Many of the cartoons published in the *Irreverent Dictionary* came from this book, and I was among those who suggested to Paul that he should publish the cartoons separately. They were, however, essential to this otherwise intimidating book that is nothing less than an operating manual for the Captain of the Virtual Network. The bottom line that I took from this book is that Kevin Kelly is right, our national and international information systems are "out of control" and our policy leaders have abdicated their responsibilities to technicians who do not have the political, economic, or common sense of two ducks and a chicken. As Paul alludes in one of his footnotes, the Network today is somewhat in relationship to the "horseless carriage" stage of the automobile, and we have a very long way to go before policy helps make computers as user-friendly and reliable and interoperable as the telephone and the automobile are today.

Information, Strategic Perspectives

Boisot, Max H., *Information Space: A Framework for Learning in Organizations, Institutions and Culture* (Routledge, 1995).

Together with Edward Wilson's *Consilience* this is the most structured and focused book in this section, and has real applicability as to how one might organize a truly *national* (that is to say, not just spy) intelligence community. Written from a transatlantic perspective, integrating the best of American and European thinking in his references, the author addresses the nature of information, its structuring, the dynamics of sharing information, learning cycles, institutional and cultural contexts, and ends with this thought: that we have spent close to a century "de-skilling" the population to suit assembly line needs and now must spend close to a century "re-skilling" the population to deal with complex information tasks where every action and reaction will be unique.

Branscomb, Anne Wells, *Who Owns Information: From Privacy to Public Access* (Basic Books, 1994).

This is a unique book by a very respected scholar. It methodically goes, chapter by chapter, over who owns your name and address (the U.S. Postal Service does), your telephone number, your medical history, your image, your electronic messages, video entertainment, religious information, computer software, and government information. The answers are not always obvious. A real benchmark.

Carkhuff, Robert, *The Exemplar: The Exemplary Performer in an Age of Productivity* (Human Resource Development Press, 1984).

This book had a profound influence on me, helping me to understand that the functions fulfilled by an employee dealing with "things" are completely distinct from the functions fulfilled by an employee dealing with "ideas", and that completely different educational, training, management, and compensation models are needed for the new "Gold Collar" worker. From this book I realized that virtually everything we are doing in U.S. education and U.S. personnel management and training today is way off the mark and at least a decade if not two or three decades behind where we could be in human productivity management.

Cleveland, Harlan, *The Knowledge Executive: Leadership in an Information Society* (E.P. Dutton, 1985).

This book was a catalyst in changing my own focus from that of reforming the classified intelligence community, to that of creating a "virtual intelligence community" that served as an on-going educational program for government and business leaders. "If there was ever a moment in history when a comprehensive strategic view was needed, not just by a few leaders in high (which is to say visible) office but by a large number of executives and other generalists in and out of government, this is certainly it. Meeting that need is what should be *higher* about higher education."

Collier, Harry, *The Electronic Publishing Maze: Strategies in the Electronic Publishing Industry* (Infonortics, 1998).

Harry is the founder and sponsor of the very interesting Association for Global Strategic Information. His book is as good a review as one could ask for, of "whither electronic publishing." He defines the pieces as consisting of data originators, information providers, online vendors, information integrators, delivery channels, and customers. Overall Harry is quite firm on pointing out that the Internet is not revolutionary and will not transform most medium and small businesses in the near future. He goes over the Internet in relation to established publishers, covers pricing and copyright issues in relation to the Internet, and ends with a discussion of next generation applications and technologies and forecasts.

Foucault, Michel, *POWER/KNOWLEDGE: Selected Interviews & Other Writings, 1972-1977* (Pantheon, 1977).

Some serious food for thought here. Not only is the power to define madness, criminality, and sexuality addressed, but also the active use of criminals, and sex, to suppress and subjugate the populace. Somewhat more difficult to wade through but similar to Norman Cousins, it helped provoke my thinking on how top-down unilateral command based on secrets is inevitably going to give way to bottom-up multicultural decision-making by the people based on open sources evenly shared across networks. This is really very heavy stuff, and it helps call into question the "rationality" of both

the Washington-based national security policymaking process, and the "rationality" of spending $30 billion a year on secrets in contrast to what that $30 billion a year might buy in terms of openly-available insights and overt information peacekeeping.

Kelly, Kevin, *Out of Control: The Rise of Biological Civilization* (Addison-Wesley, 1994).

Kevin, a *WIRED* Magazine editor who spoke, with Stewart Brand, at OSS '94, has produced what I regard as one of the top five books of this decade. A very tough read but worth the effort. I had not understood the entire theory of co-evolution developed by Stewart Brand and represented in the *Co-Evolution Quarterly* and *The Whole Earth* until I read this book. Kevin introduces the concept of the "hive mind", addresses how biological systems handle complexity, moves over into industrial ecology and network economics, and concludes with many inspiring reflections on the convergence of biological and technical systems. He was easily a decade if not two ahead of his time.

Kuhn, Thomas S., *The Structure of Scientific Revolutions* (University of Chicago, 1970).

I've had to buy this book three times because I keep misplacing each copy I buy. Every time I wonder how long it is going to take the U.S. Intelligence Community to get it right, I simply have to remind myself that they have not yet had sufficient cumulative pain—pain on the order of a Pearl Harbor or a mass murder of Congress—to force what Kuhn calls the "paradigm shift." Two points are worthy of emphasis: 1) the paradigm shift is always forced and 2) until the paradigm shift occurs, always suddenly, the incumbents can comfortably explain everything with their existing paradigm.

Levitan, Karen B., *Government Infrastructures: A Guide to the Networks of Information Resources and Technologies at Federal, State, and Local Levels* (Greenwood, 1987).

You absolutely do not need to read this book—when I went through it, I worried that I was becoming obsessed with knowledge and going just a bit too far down into the literature. I got two things out of this book: 1) a very nice chart on page xvii that lists the following "rows" in an information infrastructure, from *top* to *bottom*: policy goal, policy resources, policy structures, policy processes, information resources management, information users and producers, information entities, information processes, information technologies; and 2) technology is nowhere near "taking over" anything—the vast majority of the information networking is still personal and informal.

Levy, Pierre, *Collective Intelligence: Mankind's Emerging World in Cyberspace* (Plenum Trade, 1997).

This dude is a heavy hitter, and it says a lot that this one made it over the water from the French original. Clearly a modern day successor to Jacques Ellul (*The Technological Society*) and before him Pierre Teilhard de Chardin. Levy begins with the premise that the prosperity of any nation or other entity depends on their ability to navigate the knowledge space, and the corollary proposition that the knowledge space will displace the spaces of the (natural) earth, (political) territory, or (economic) commodity. He is acutely conscious of the evil of power, and hopes that collective intelligence will negate such power. He ends with a warning regarding our construction of the ultimate labyrinth, cyberspace, where we must refine the architecture in support of freedom, or lose control of cyberspace to power and the evil that power brings with it.

Luttwak, Edward N., *Strategy: The Logic of War and Peace* (Harvard University Press, 1987).

Luttwak's book not only provides articulate explanations of the differences between the strategic, operational, tactical, and technical levels of war, but shows how capabilities combine across mission areas and between levels to create a coherent matrix of mobility, weapons, and communications capabilities. This book inspired my creation of the Marine Corps model for analysis whose subsequent implementation in our first study helped demonstrate that *the threat changes depending on the level of analysis*, and consequently one's plans and capabilities must be firmly oriented not only with respect to the tangible objective, but with respect to the context—the level of action.

Mander, Jerry *In the Absence of the Sacred: The Failure of Technology & the Survival of the Indian Nations* (Sierra Club, 1991).

By the author of *Four Arguments for the Elimination of Television*, this is actually a manifesto for a popular revolution against banks, corporations, and states—a peaceful cultural revolution that has as its objectives the restoration of land ownership to the commonwealth; the acceptance of alternative economic models that optimize group cohesion instead of individual or organizational profit; and the liberation of 3,000 nations of relatively distinct groups from the subjugation imposed by the states that now have sovereign (that is to say, violent coercive) power over the individuals and groups that fall within their imposed territorial claims.

McKibben, Bill, *The Age of Missing Information* (Plume, 1992).

The author taped all the TV shows being broadcast for 24 hours, then watched all of the shows over the necessary time period, and then spend 24 hours alone with nature. There are some well-thought and well-articulated insights in this book. Information is not a substitute for nature. The information explosion is drowning our senses and cutting us off from more fundamental information about our limitations and the

limitations of the world around us. Television really did kill history, in that it continually celebrates and rehashes the 40 years of time for which there is television film on background, and overlooks the 4000 years behind that. The worst disasters move slowly, and the TV cameras don't see them.

Neustadt, Richard E. and Ernest R. May, *Thinking in Time: The Uses of History for Decision Makers* (Free Press, 1986).

Together with Luttwak's book, and a few others on cultural frames of reference, this book is an essential point of reference for understanding the analogies and other devices that decision makers use to evaluate information, and hence suggests that there must be certain deliberate actions analysts can take to present compelling intelligence using tailored analogies and terms that strike the correct chord with the individual consumer.

Norman, Donald A., *Things That Make Us Smart: Defending Human Attributes in the Age of the Machine* (Addison-Wesley, 1993).

Technology can make us smart. Or stupid. It can liberate. Or enslave. Norman joins a select group of thinkers advocating a human-centered approach to technology. Inspired (or, more accurately, depressed) by Jerry Mander, he wrote this book to examine the differences between humans and machines, and to establish some ground rules for policy that protected the one and leveraged the other. Norman notes that when technology is not designed from a human-centered point of view, it produces accidents and more often than not the human is blamed. He focuses especially on the distinction between experiential cognition and reflective cognition, and laments that television and entertainment are swamping us with the experiential and not teaching us the reflective. He is concerned that our ever-lengthening chain of technology dependence is forcing us to deal with ever-increasing loads of information at the same time that it weakens our inherent capabilities further. People first, science second, technology as servant.

Rossell, Steven A. et al., *Governing in an Information Society* (Institute for Research on Public Policy, 1992).

There are a whole range of books on "this and that in the age of information." This is one of the most concise, does a nice job of drawing on all the major literature in the 1980's and early 1990's, and explores the issues in relation to governance in a networked environment.

Rothfeder, Jefrey, *Privacy for Sale: How Computerization Has Made Everyone's Private Life An Open Secret* (Simon & Schuster, 1992).

This book is a perfect complement to Anne Branscomb's, and provides a well-told tale, researched in partnership with a private investigator, of just what can be gotten on you

through the electronic web within which we all live our lives. This book is the tactical gutter in your face version, Branscomb's book is the academic dissection.

Sale, Kirkpatrick, *Rebels Against the Future: The Luddites and Their War on the Industrial Revolution* (Addison-Wesley, 1995).

Lessons from the Luddites for the Computer Age include: 1) Technologies are never neutral, and some are hurtful; 2) Industrialism is always a cataclysmic process, destroying the past, roiling the present, making the future uncertain; 3) "Only a people serving an apprenticeship to nature can be trusted with machines."; 4) The nation-state, synergistically intertwined with industrialism, will always come to its aid and defense, making revolts futile and reform ineffectual; 5) But resistance to the industrial system, based on some grasp of moral principles and rooted in some sense of moral revulsion, is not only possible but necessary; 6) Politically, resistance to industrialism must force not only "the machine question" but the viability of industrial society into public consciousness and debate; 7) Philosophically, resistance to industrialism must be embedded in an analysis—an ideology, perhaps—that is morally informed, carefully articulated, and widely shared; 8) If the edifice of industrial civilization does not eventually crumble as a result of determined resistance within its very walls, it seems certain to crumble of its own accumulated excesses and instabilities within not more than a few decades, perhaps sooner, after which there may be space for alternative societies to arise.

Shattuck, Roger, *Forbidden Knowledge: From Prometheus to Pornography* (St. Martin's Press, 1996).

Beyond the mundane discussions about secrecy versus openness, or privacy versus transparency, there is a much higher level of discussion, one about the nature, limits, and morality of knowledge. As I read this book, originally obtained to put secrecy into perspective, I suddenly grasped and appreciated two of the author's central thoughts: knowing too much too fast can be dangerous; and yes, there are things we should not know or be exposed to. *Who decides?* Or *How do we the people decide?* are questions that must be factored into any national knowledge policy or any national information strategy. This book left me with a sense of both the sacred and the scary sides of unfettered knowledge. This is less about morality and more about focus, intention, and social outcomes. It is about the convergence of power, knowledge, and love to achieve an enlightened intelligence network of self-governing moral people who are able to defend themselves against evil knowledge and prosper by sharing good knowledge.

Swegen, Hans, *The Global Mind: The Ultimate Information Process* (Minerva UK, 1995).

This is a 211-page essay with no footnotes, bibliography, index, or information about the author. It is a great read, and one can only imagine the author hunched over a pad over the course of a very long Nordic winter with no sun. He starts with "human DNA molecules, which are information carriers, consist of 2300 million nucleotides, which contain the information for nearly one million genes" and goes from there. At the end mind and matter merge, energy, ecology, body and mind come together...and at that point individuals lose some of their individuality, and the global mind turns outward, toward the cosmos.

Teilhard de Chardin, Pierre, *The Phenomenon of Man* (Harper, 1965).

The originator of the term *noosphere* and all this implies.

Toffler, Alvin, *PowerShift: Knowledge, Wealth, and Violence at the Edge of the 21st Century* (Bantam, 1990).

Alvin augments our vocabulary with terms like "info-warrior", "eco-spasm", "super-symbolic economy" and "powershift." He examines the relationship between violence, wealth, and knowledge and concludes that an entirely new system of wealth creation is emerging, as well as entirely new approach to information dissemination that places most of our command and control, communications, computing, and intelligence (C4I) investment in the dump heap with the Edsels of the past. He anticipates both the emergence of information wars at all levels, and the demise of bureaucracy. He cautions us about the emerging power of the "Global Gladiators"—religions, corporations, and terrorists (nice little mix) and concludes that in order for nations to maintain their strategic edge, an effective intelligence apparatus will be a necessity and will "boom" in the 21st Century, with the privatization of intelligence being its most prominent break from the past.

Walshok, Mary Lindenstein, *Knowledge Without Boundaries: What America's Research Universities Can Do for the Economy, the Workplace, and the Community* (Jossey-Bass, 1995).

An industrial sociologist by training, now Associate Vice Chancellor for Extended Studies and Public Service at the University of California, San Diego (UCSD), Walshok begins by challenging universities, exploring the social uses of knowledge, assessing the new knowledge needs of diverse populations, and providing a matrix approach to matching university resources to community knowledge needs. In the second half of the book she focuses on special economic, human, and civic benefits, and ends with her bottom line: neither communities, nor universities, can learn in isolation.

Wells, H. G., *World Brain* (Adamantine, 1994).

First published in 1938, this modern edition is vastly improved by the addition of a critical introduction by Alan Mayne. Very much focused on how a world-brain might alter national policy-making, how Public Opinion or an "Open Conspiracy" might restore common sense and popular control to arenas previously reserved for an elite. The information functionality of the World Brain easily anticipated the world wide web as it might evolve over the next 20-30 years: comprehensive, up to date, distributed, classification scheme, dynamic, indexes, summaries and surveys, freely available and easily accessible. We have a long way to go, but the framework is there. The communication functions of the world brain would include a highly effective information retrieval system, selective dissemination of information, efficient communication facilities, effective presentation, popular education, public and individual awareness for all issues, and facilitate social networking between organizations, groups, and individuals. The world brain *is* the "virtual intelligence community" *qua* noosphere.

Wilson, Edward O., *CONSILIENCE: The Unity of Knowledge* (Alfred A. Knoph, 1998).

Our answer to Levy, but an order of magnitude more practical and steeped in some of the best endnotes I've ever enjoyed. Consilience is the "jumping together" of knowledge across boundaries, and the greatest enterprise of the mind. He begins with an example, showing how biology, ethics, social science, and environmental policy must all come together to properly resolve a global environmental issue, but actually do not—the learned individuals are fragmented into four separate communities, and within those communities further fragmented into nationalities and cliques and jobs, and it is our greater loss for we cannot arrive at the best policy without being able to integrate the knowledge across all these boundaries. He emphasizes that the public must be educated and have access to this unified knowledge, not just the policymakers. He poses, and then answers across the book, this question: "What is the relation between science and the humanities, and how is it important to human welfare?" In my own mind, Edward O. Wilson has defined both national and global intelligence writ large, and done so in way that suggests the "virtual intelligence community" is a very practical and achievable vision.

Wurman, Richard Saul, *Information Anxiety* (Doubleday, 1989).

Ted is the genius behind the TED conferences that cost $3000 to attend, all clear profit because he has created such a convergence of minds across the media, information, technical, and biological sciences that sponsors beg for opportunities to pay for everything. It is a very cluttered book, the kind of thing that happens when an impatient genius wants to fix varying design formats with quasi-logical thinking, but it is definitely worth the effort. The nugget for me was in his observation that while many businesses are devoted to the collection, transmission, or storage of information,

there are no businesses he knew of dedicated to enhancing *understanding*. This book is a marvelous problem statement and offers many intriguing thoughts on how to enhance both how you interact with external information sources, and how to add value to the information that passes through you to others.

Information, Tactical Methods

Several books in the "Internet Yellow Pages" and "Do Business on the Internet" genres were originally stacked up for inclusion here but as soon as I realized I could not recommend them for purchase, it became clear they should not be listed. By and large books on the Internet are of very transient value.

Basch, Reva, *Secrets of the Super Searchers* (Eight Bit Books, 1993).

Reva, one of the top five information brokers in the USA, sought out and interviewed 35 professional or gifted amateur *commercial online (fee for service)* searchers and provides in this book a delightful free-flowing conversation with each of them as a "master's class" for intelligence and information professionals.

Basch, Reva, *Secrets of the Super Net Searchers* (Pemberton Press, 1996).

Reva, one of the top five information brokers in the USA, sought out and interviewed 35 professional or gifted amateur *Internet* searchers and provides in this book a delightful free-flowing conversation with each of them as a "master's class" for intelligence and information professionals.

Bates, Mary Ellen, *The Online Deskbook* (Pemberton Press, 1996).

Mary Ellen, or MEB, is the online broker I turn to when I can't solve something in-house. Her book is a working desktop reference, covering the main commercial online services as well as major Internet channels.

Burwell, Helen P., *Online Competitive Intelligence: Increase Your Profits Using Cyber-Intelligence* (Facts on Demand Press, 1999).

This is the most recent guide, by one of the top five information brokers in America. Helen, a past president of the Association of Independent Information Brokers, is also the publisher of the unique *Worldwide Directory to Information Brokers* and perhaps the best connected information broker in the world.

Coleman, Edwin J. and Ronald A. Morse, *DATA: Where It Is and How to Get It* (Coleman/Morse Associates, 1992).

This book, a directory of data sources for business, environment, and energy, is representative of an intermediary product, a hard-copy "portal" to U.S. Government economic experts and the data that taxpayers pay to collect and organize. It provides a valuable service, largely because the U.S. Government stinks at being accessible.

Goldmann, Nahum, *Online Information Hunting* (McGraw Hill, 1992).

If you ever want to scare your children, buy them this book. It covers the minutia of information search strategies for commercial online databases prior to the development of web-based interfaces. A great deal of it is still valuable, and I recommend it mostly because it really captures the complexity of online searching in an era when there is both a flood of information and a dearth of good processing tools.

Martin, Frederick Thomas, *TOP SECRET Intranet: How U.S. Intelligence Built Intelink—The World's Largest, Most Secure Network* (Prentice Hall, 1999).

I was given this book at Hacker's (the MIT/Silicon Valley legal and largely very rich group, of which I am an elected member) by a NASA engineer, went to bed, could not get the book out of mind, got up, and read it through the night. If it were not for the fact that Intelink is largely useless to the rest of the world and soon to be displaced by my own and other "extranets", this book would be triumphal. As it is, I consider it an extremely good baseline for understanding the good and the bad of how the U.S. Intelligence Community addresses the contradictions between needing access to open sources and emerging information technologies while maintaining its ultra-conservative views on maintaining very restricted access controls to everything and everyone within its domain. I have enormous regard for what these folks accomplished, and wish they had been able to do it openly, for a much larger "virtual intelligence community" willing and able to share information. For a spy, information shared is information lost—until they get over this, and learn that information not only increases in value with dissemination but is also a magnet for 100 pieces of information that would never have reached them otherwise, the U.S. Intelligence Community will continue to be starved for both information and connectivity....an SGML leper in an XML world.

Rugge, Sue and Alfred Glossbrenner, *The Information Broker's Handbook* (Windcrest, 1992).

In contrast to Mary Ellen's book, this book is actually for self-starters who are thinking about creating their own small business and covers such excellent basics as the market for information, what an information broker does, the pros and cons of the information business, and then the tools, followed by chapters on marketing, pricing, and project management. Although seven years old now, I still regard this as a good starting point

for those who would understand the information brokering business (a small niche within the larger open source intelligence business).

Information, Warfare (Cyberwar)

Baklarz, Ron and Richard Forno, *The Art of Information Warfare* (Professional Press, 1997).

This book, listed with www.amazon.com, is among the ten most popular books on information warfare, and provides a mix of easy to read adaptations of Sun Tzu and other Chinese sayings to issues of computer security, with useful discussions of the importance of all that goes with making information systems safe, secure, and private.

Campen, Alan D. (ed.), *The First Information War* (AFCEA Press, 1992).

As Director C2 Policy in OSD, Alan was intimately familiar with the weapons, tactics and information systems being developed in the Reagan military buildup and foresaw the pivotal role of information in the Gulf War. He may reasonably be considered one of the first offical sponsors of military thinking in this area. This is one of the first serious books to be published in this area, is based largely on the Gulf War experience, and emphasizes command and control, communications, and computer (C4) issues to the detriment of intelligence (I).

Campen, Alan D., Douglas H. Dearth, and R. Thomas Gooden, *Cyberwar: Security, Strategy and Conflict in the Information Age* (AFCEA Press, 1996).

This book is a very fine compilation, spanning a whole range of technical and non-technical aspects of information warfare, and including my own invited chapter on "Creating a Smart Nation: Information Strategy, Virtual Intelligence, and Information Warfare." This is a basic text and those in charge of our information warfare segments today would do well to read it again and again because most of them are focusing on one tiny slice of the IW mission, hot bits.

Campen, Alan D. and Douglas H. Dearth, *Cyberwar 2.0: Myths, Mysteries and Reality* (AFCEA Press, 1998).

This sequel to the first book on cyberwar is even better (and the first one was very good) because it is much more deliberate about addressing strategy and diplomacy (part one); society, law, and commerce (part two); operations and information warfare (part three, where most military professionals get stuck); and intelligence, assessment, and modeling (part four). My chapter on "Information Peacekeeping, the Purest Form of War" appears here, but based on the lack of feedback I suspect all of the contributions in this section are a decade away from being understood with the U.S. Government.

The final part offers four chapters on the future, including an excellent discussion of "Cyberwar: The Role of Allies and Coalition Partners" by Commodore Patrick Tyrrell, then a Royal Navy Captain and now a Commodore responsible for "stuff" in the UK.

De Landa, Manuel, *War in the Age of Intelligent Machines* (Swerve, 1991).

A very early and largely academic-historical-philosophical discussion of the changing nature of the relationships between humans, computers, and war. Written prior to the Silicon Valley explosion, and thus still very concerned about the military dominance of information technology. A good alternative overview.

Thomas, Keith (ed.), *The Revolution in Military Affairs: Warfare in the Information Age* (Australian Defence Studies Centre, 1997).

With an introduction by Andy Marshall, "the man" for net assessments from the old school, this book is a good example of the state of the best thinking currently available within the allied military community. Marshall emphasizes the two twin pillars of future war that are emerging in his world: precision munitions, and information warfare (but meaning information superiority). There are many good observations, for instance on information pathologies within the military, and on the fact that the military is at least a decade (if not two or three) behind the private sector in exploiting state of the shelf information technologies.

Schwartau, Winn, *Information Warfare: Chaos on the Information Highway* (Thunder's Mouth Press, 1994).

This is the original bible, and my former partner (in InfoWarCon) deserves much more credit than he has gotten from Congress or the military or the U.S. business community. He single-handedly foresaw the future (see *Terminal Compromise*) and set about creating the bru-ha-ha that ultimately led to his formal testimony to Congress on the possibilities of an "electronic Pearl Harbor" (his term, not anyone else's) and the subsequent establishment by the White House of a task force for the protection of critical infrastructure. In this book Winn lays out the nature of individual, corporate, and state-sponsored information warfare (including economic espionage and information terrorism or vandalism), and proposes some solutions.

Schwartau, Winn, *Information Warfare: Cyberterrorism: Protecting Your Personal Security in the Electronic Age* (Thunder's Mouth Press, 1996).

This 767-page tome contains a number of new chapters by Winn and over 400 pages from the best of those who spoke at two of our conferences. It includes a directory of "who's who" in cyberspace in relation to information warfare and electronic security, and can be considered the "state of the art" for 1996.

Schwartau, Winn, *Terminal Compromise: A Novel About Computer Terrorism* (Inter-Pact Press, 1991).

There is a level of understanding about the computer "threat" that cannot be achieved by reading learned chapters, and this novel is just plain good. It describes a multi-faceted anonymous information war on the United States launched out of Japan, but get ready for the surprise ending. Still a great book.

Intelligence

Berkowitz, Bruce D. and Allan E. Goodman, *Strategic Intelligence for American National Security* (Princeton, 1989).

This is an even-tempered book, combining a good primer of the nature of the intelligence process with some analytically-oriented thoughts on needed improvements. Their appendix listing things that can go wrong at each step of the intelligence cycle is of lasting value, as is their glossary. Their forthcoming book, *Best Truth: Intelligence in the Information Age* (Yale, April 2000) will assuredly be a major contribution.

Bozeman, Adda B., *Strategic Intelligence & Statecraft: Selected Essays* (Brassey's US, 1992).

While reading this book, every intelligence professional should feel like a bashful second-grader shuffling their feet while being kindly reprimanded by their teacher. This book, a collection of essays from the 1980's, is the only one I have ever found that truly grasps the strategic long-term importance of intelligence in the context of culture and general knowledge. The heart of the book is on page 177: "(There is a need) to recognize that just as the essence of knowledge is not as split up into academic disciplines as it is in our academic universe, so can intelligence not be set apart from statecraft and society, or subdivided into elements...such as analysis and estimates, counterintelligence, clandestine collection, covert action, and so forth. Rather, and as suggested earlier in this essay, intelligence is a scheme of things entire. And since it permeates thought and life throughout society, Western scholars must understand all aspects of a state's culture before they can assess statecraft and intelligence." The 25-page introduction, at least, should be read by every intelligence professional.

Copeland, Miles, *Without Cloak or Dagger: The Truth About the New Espionage* (Simon and Schuster, 1947).

This is one of my two required readings for any aspiring intelligence officer or student of intelligence. An absolute gem across the board, providing insights into both capabilities and culture. The description on pages 41-42 (of the original hard-cover

version) of how "Mother" concocted an entire network and got the head of Secret Intelligence to agree its production was worth $100,000 a year (big money in 1946), only to reveal that his source was actually five issues of *The New York Times* "demonstrated not only the naiveté of our nation's only existing group of espionage specialists but the value of ordinary *New York Times* reporting on matters regarded as being of high-priority intelligence interest." Nothing has changed in 50 years.

Dearth, Douglas H. and R. Thomas Goodden (ed.), *Strategic Intelligence: Theory and Application* (U.S. Army War College, 1995).

This is not a well known book, having been published as a limited edition educational work for the defense intelligence school system, but it is well-worth getting—a few hundred copies are still available from Doug at <DHDEARTH@aol.com>. Most of the contributions are exceptional, including John Macartney's "Intelligence: What It Is and How To Use It" and several excellent pieces from Michael Handel, Morton Halperin, and others on warning, surprise, and deception. The last chapters are weak and appear to have been thrown together to justify a "new directions" aspect, but they too are worth reading.

Dulles, Allen, *The Craft of Intelligence* (Signet, 1965).

This is the other required reading. This gem sits on my desk with my dictionary of difficult words and my synonym dictionary. We still do not have an equal to this book. Since Dulles testified to Congress that 80% of the raw material for finished intelligence came from public sources including diplomatic reporting, this book provides an interesting benchmark for understanding the rather pathological impact of technical collection on the larger process of *all*-source collection and analysis.

Herman, Michael, *Intelligence Power in War and Peace* (Cambridge University Press, 1996).

This is the textbook to use if you have really intelligent students. It is not an easy read, between the British language form and the deep thinking, but it is, as Christopher Andrew says, "the best overview" and "surely destined to become a standard work." I liked its attention to components and boundaries, effects, accuracy, and evaluation. More recently Michael has written "British Intelligence In The New Century: Issues And Opportunities." Perhaps most important within his book is the distinction between long-term intelligence endeavors that rely primarily on open sources and serve to improve state understanding and state behavior, and short-term espionage that tends to be intrusive and heighten the target's feelings of vulnerability and hostility.

Johnson, Loch K., *Secret Agencies: U.S. Intelligence in a Hostile World* (Yale, 1996)

Loch is the dean of the scholars competent to address intelligence matters, and his experience as a member of the professional staff of both the Church Committee in the 1970's and the Aspin/Brown Commission in the 1990's uniquely qualify him to discuss and evaluate U.S. intelligence. His chapters on the ethics of covert operations and on intelligence accountability set a standard for this aspect of the discussion. This is the only book I have seen that objectively and methodically discusses intelligence success and failures in relation to the Soviet Union, with a superb three-page listing decade by decade being provided on pages 180-182.

Laquer, Walter, *A World of Secrets: The Uses and Limits of Intelligence* (Basic Books, 1985).

I continue to regard this book as one of the best available textbooks for inspiring informed student and entry-level employee discussion about the intelligence professional and its role in supporting policy-making. The author's conclusion, and the "eleven points" he makes regarding the current status and future of intelligence, continue to be an essential contribution to the great debate.

Lowenthal, Mark, *Intelligence: From Secrecy to Policy* (Congressional Quarterly Press, 1999).

This is an excellent elementary text for the average college student. Over-all it is strong on issues of analysis, policy, and oversight, and weak on collection, covert action, and counterintelligence. The chapter on collection has a useful figure comparing the advantages and disadvantages of the five collection disciplines, and but does not get into the detail that this aspect of the intelligence community—80% of the annual expense—merits.

Lowenthal, Mark, *The U.S. Intelligence Community: An Annotated Bibliography* (Garland, 1994).

Mark is arguably America's foremost intelligence historian, and especially strong on analysis and oversight. The seventy-page bibliography he has put together is useful.

Shulsky, Abram N., *SILENT WARFARE: Understanding the World of Intelligence* (Brassey's, 1991).

I rather like this book, and believe it continues to have value as a primer on intelligence for both students and entry-level employees. Most interesting is the distinction that Shulsky, himself a former defense analyst, professional staffer on the Hill, and sometime Pentagon policy wonk, makes between the "Traditional" view of intelligence as "silent warfare", and the "American" view of intelligence as "strategic analysis."

Intelligence, Analysis

Codevilla, Angelo, *Informing Statecraft: Intelligence for a New Century* (Free Press, 1992)

"It is not too gross an exaggeration that when considering any given threat, DIA will overestimate, CIA will underestimate, and INR will blame the U.S. for it." From his opening chapter and his distinction between static, dynamic, and technical facts, on through a brilliant summary of the post-war spy on page 103 and lengthy sections on how we've gotten it wrong, how we can get it right, and what is needed in the way of reform, I found this book worthy of study. An analyst and political staffer by nature, the strength of this book rests on the premise in the title: that intelligence should be about informing policy, not about collecting secrets for secrets' sake.

Gentry, John A., *LOST PROMISE: How CIA Analysis Misserves the Nation (An Intelligence Assessment)* (Lanham, 1993).

John has written a very personal book, somewhat vitriolic in its attacks on both Bob Gates for politicization and Directorate of Intelligence managers in general for being both ignorant and lacking in courage. It is essential reading for anyone considering improvements in how we do intelligence analysis, and includes an eighteen-point program for reforming both the process of intelligence and the management of intelligence analysis. The figure on page 226 comparing the Traditional, Opportunity-Oriented, and Opportunism-Oriented "Schools" of intelligence analysis is alone worth the price of the book. Includes a number of interesting original internal documents from his fight with DI management.

Intelligence, Business and Competitive

The literature on business intelligence is remarkably under-developed, and just now beginning to emerge. My general assessment of most business intelligence analysts is that they are in the fourth or fifth grade with respect to the process of intelligence. Only 5% of U.S. corporations and 9% of European corporations have a specific business intelligence function established (according to the Planning Forum in the mid-1990's). There are a few centers of excellence—generally specific pharmaceutical or major oil companies—but on balance I believe this arena to be in the "1950's" in contrast to the open source intelligence movement that I regard as ten years ahead of its time.

Ashton, W. Bradford and Richard A. Klavans (ed.), *Keeping Abreast of Science and Technology: Technical Intelligence for Business* (Battelle Press, 1997).

Dick is a genius, and he and Bradford Ashton have pulled together a number of very fine contributions in this book. Still, they sum it up nicely in the concluding chapter: "The formal practice of developing technical intelligence in American business is only in its infancy." They have a nice appendix of sources on scientific and technical intelligence that is missing a few big obvious sources like the Canadian Institute for Scientific and Technical Information (CISTI) and the Defense Technical Information Center (DTIC) as well as the Institute of Scientific Information (ISI) and several smaller sources. On balance, this technical intelligence community is, as Bradford notes, in its infancy. It is U.S. centric, does not yet understand operational security and counterintelligence, is weak of cost intelligence, relies too heavily on *registered* patents, and has too few practical successes stories. Especially troubling is the recent trend within DIA and the Air Force of cutting off all funding for open source exploitation of Chinese and other foreign S&T sources, combined with a dismantling by many corporations of their libraries and most basic market research functions. This book is an *essential* reference and I admire its authors greatly—sadly, they are part of a small minority that has not yet found its full voice.

Bernhardt, Douglas, *Perfectly Legal Competitor Intelligence: How to Get It, Use It and Profit from It* (Pittman UK, 1994).

This is an excellent primer. A subtle underlying theme that is not fully articulated is that of the varying standards across national boundaries of what is and is not legal. In general, and I draw here on work the work of others, the US and UK are most restrictive, with the Germans and Israeli's in the middle (using pretext interviews and other "legal" but deceptive tactics), while the French, Russians, Japanese, Koreans and Chinese are on the lower end of the scale, where anything goes including breaking and entering.

Fuld, Leonard M., *The New Competitor Intelligence: The Complete Resource for Finding, Analyzing, and Using Information About Your Competitors* (John Wiley & Sons, 1994).

This is a serious general text on competitive intelligence, and Leonard is a master. Having said that, I would note that what Leonard does best is work very hard—the practice of business intelligence still lacks a good set of information technology tools for discovering, discriminating, distilling, and delivering packaged business intelligence, and most firms do not have the tools for managing a broadly distributed network of niche experts who are hired on a day to day basis. Fuld & Company Inc., and to a lesser extent the other companies listed in the Open Source Marketplace, are

the first wave in what I believe will be a major line of business to business revenue in the 21st Century.

Kahaner, Larry, *Competitive Intelligence: From Black Ops to Boardrooms—How Businesses Gather, Analyze, and Use Information to Succeed in the Global Marketplace* (Simon & Schuster, 1996).

Larry builds his last chapter, "Competitive Intelligence: The Next Generation" around my ideas, so I can hardly complain. This is a good airplane book, a very nicely organized and easy to read overview. In fact, I would say that this book has to be read before reading the books by Leonard Fuld or Brad Ashton and Dick Klavans. One of the things I like most about Larry's book is that it understands and trys to explain that national competitiveness overall—a "Smart Nation"—must be built on a foundation of "Smart Corporations."

McGonagle, John J. Jr. and Carolyn M. Vella, *A New Archetype for Competitive Intelligence* (Quorum Books, 1996).

The authors are serious professionals with several competitive intelligence books behind them, and try in this book to relate the requirements of competitive intelligence to the emerging opportunities of the Internet and information tools—what they characterize and trademark as "cyber-intelligence"™. It's a good book, worth reading.

Meyer, Herbert, *Real-World Intelligence: Organized Information for Executives* (Grove Widenfeld, 1987).

Herb, one of the distinguished speakers at OSS '92, has been Vice Chairman of the National Intelligence Council, and is in my mind one of the top five pioneers of business intelligence in the United States. He started in late 1970's, and his little paperback book is both a gospel and a guide of continuing value. This book was distributed at OSS '92, and continues to be worthy of reading by senior executives who don't do a lot of reading.

Prescott, John E. and Patrick T. Gibbons (ed.), *Global Perspectives on Competitive Intelligence* (Society of Competitive Intelligence Professionals, 1993).

This is the most professional collection of articles on competitive intelligence I know of, with a good mix of both technical intelligence and foreign intelligence information. The Society of Competitive Intelligence Professionals (SCIP), under the day to day leadership of Guy Kolb, has grown from 2,000 members in 1992 to 6,000 in 1999, and it's journal as well as its conferences, set the industry standard. A relatively low standard, but the standard never-the-less.

Sigurdson, Jon, and Yael Tagerud, *The Intelligent Corporation: The Privatization of Intelligence* (Taylor Graham, 1992).

If I recognize anyone as my predecessor in this revolution, it would be Stevan Dedijer from Croatia and Sweden. This book, dedicated to and devised to celebrate Stevan's 80th birthday on 6 July 1991, is a graduate-level yet easy to read collection of articles on the field of private intelligence. Stevan, widely recognized as the father of both business intelligence and social intelligence (I'm surprised he did not focus on cultural and religious intelligence systems as well), has established the standard I have to match. He says: "Nobody has yet built a holistic view of intelligence. There is an increasing need for the integrated study of the human brain, personality, machines, and the social system. There is not yet a method to study how these factors interact with each other." The collection ends with references to the "world brain" that I hope to tap into and empower with OSS.NET. This annotated bibliography is in small part my own tribute to Stevan.

Shaker, Steven M. and Mark P. Gembicki, *The WarRoom Guide to Competitive Intelligence* (McGraw Hill, 1999).

I have mixed feeling about these guys, and their book, but the bottom line is that it makes a contribution and must be read. They address, in a manner understandable by the complete layman, the intersection of competitive intelligence, corporate security, and WarRoom operations. They have a number of very useful and thoughtful figures. The book is unquestionably at the head of the class with respect to WarRoom operations and exploiting information technology and basic planning and execution and visualization concepts. Where I have a real problem with this book is in its advocacy of elicitation and other deceptive techniques, no doubt a hang-over from Steven's days as a CIA case officer. There is absolutely no place in U.S. competitive intelligence for such methods, and any discussion in that direction must be forcefully opposed if we are to succeed in creating a legal, ethical, overt network of intelligence professionals able to reinforce each other in providing open source intelligence to businesses as well as non-governmental organizations.

Stanat, Ruth, *The Intelligent Corporation: Creating a Shared Network for Information and Profit* (American Management Association, 1990).

Well before I got into the open source business Ruth was managing global business intelligence activities, and she wrote the book I would have written if I had had to choose one starting point. This is an essential reference for every manager, both in government and in business as well as in the non-profit arena, and I continue to regard Ruth as the dean of the practical business intelligence educators. Together with Jan Herring, Dick Klavans, Herb Meyer, and Leonard Fuld, she completes the *de facto* U.S. board of directors for real-world business intelligence.

Intelligence, Coalition and Peacekeeping

Pickert, Perry L. and Russell G. Swenson (ed.), *Intelligence for Multilateral Decision and Action* (Joint Military Intelligence College, June 1997).

This book is important as a testament to just how broken the Defense Intelligence Agency is with respect to coalition and peacekeeping intelligence. Fully a year after the Joint Military Intelligence Training Center across the hall published *Open Source Intelligence: Handbook*, these people still had not figured out the fact that open sources of intelligence are the crux of the matter for intelligence support to coalition and peacekeeping operations. I attended the first day of the conference that featured many of the authors as well as a whole flock of Partner for Peace officers flown in for the occasion, and I left greatly saddened by the fact that the whole first day was spent talking about how improvements were needed in sanitizing and disseminating classified intelligence across multi-lateral units. I am told that on the second day of the conference there was no substantive reference to open source intelligence. This book is a good benchmark for evaluating where the DIA bureaucracy is on this important topic: in the basement. (The new CINC OSINT Working Group, by contrast, "gets it.")

Intelligence, Collection

Bamford, James, *The Puzzle Palace: A Report on America's Most Secret Agency* (Houghton Mifflin, 1982).

The book is nothing short of sensational, for two reasons: it is the first and still the only really comprehensive look at global signals intelligence operations as dominated by the National Security Agency; and second, because all of his research was done using only open sources, including unclassified employee newsletters at Alice Springs, and he did a great job of making the most out of legally and ethically available information. James is still around, working on another book about SIGINT, and I believe that only he will be able to top this one.

Burrows, William E., *DEEP BLACK: Space Espionage and National Security* (Random House, 1986).

This is still the only really great book on overhead reconnaissance, and I have been surprised and disappointed to see it overlooked by the mainstream intelligence academics. Contains useful early history on why we got into technical collection (our human spies kept getting killed on arrival as we took the easy route of recruiting from émigré organizations already penetrated by the KGB and GRU). Ends with a passing reference to commercial imagery, a topic that merits its own book.

Claridge, Duane R., *A Spy for All Seasons: My Life in the CIA* (Scribner, 1997).

Dewey was a Division Chief when I was a junior case officer, and I continue to admire him. His pocket handkerchiefs were amazing—you could parachute from a plane with one in an emergency. Dewey's bottom line is clear: he concludes that "the Clandestine Services (*sic*) is finished as a really effective intelligence service." He has other worthwhile insights, ranging from the inadequacy of the information reaching CIA analysts from open sources (e.g. Nepal), to the "wog factor" dominating CIA analytical assessments (e.g. Pakistan will never attack India), to the sterile and politically-safe approaches to intelligence by the leadership of NSA and the some of the military intelligence services. My bottom line on Dewey is also clear: he was typical of the case officer talent pool, he tried very hard, and the system still failed. He was a good person in a very bad system.

Sakharov, Vladimir, *High Treason* (Ballentine, 1980).

Not necessarily for students, this paperback from the Ballentine Espionage/Intelligence Library is sensational. I had already been a case officer overseas when I read it, and I read it with real admiration for the Soviet Division and the case officers who had the luxury of doing it "right." From the overseas evaluations to the discreet subway signal of interest in Moscow to the follow-up that resulted in a recruitment in place and an ultimate exfiltration across the desert of Kuwait, this is a magnificent account of "the way it is supposed to be" in the clandestine service. It has a spy's kind of happy ending—really rotten treatment by CIA security blockheads during the resettlement program, a very long drunken period, hit bottom, and finally get clean and work your way free from the system on your own.

Holden-Rhodes, J. F., *Open Source Intelligence & The War on Drugs* (OSS Academy, 1994).

James Holden-Rhodes, an experienced military professional as well as a very respected analyst within two of the Nation's national laboratories focused on the secrets of science, wrote this book to describe his practical experience using open sources of information to create tactical and operational intelligence in support of drug interdiction missions by the U.S. Southern Command and the Drug Enforcement Agency. I printed the book in 1994 for all those attending OSS '94, and it has been subsequently offered to the larger marketplace by the U.S. Naval Institute Press. James is dynamic, thoughtful, and not to be denied. This is the first documented case in which open sources and methods costing roughly $150,000 a year, were proven significantly more timely and capable of producing actionable drug eradication and interdiction intelligence than an equivalent $12 million effort using classified sources and methods.

Thomas, Evan, *The Very Best Men—Four Who Dared: The Early Years of the CIA* (Simon & Schuster, 1995).

I almost broke two fountain pens on this book, and that is close to my highest compliment. Depending on one's mood, it will move any person with a deep knowledge of intelligence to tears or laughter. This is a really superior detailed look at the men that set the tone for clandestine operations in the 20th century: "Patriotic, decent, well-meaning, and brave, they were also uniquely unsuited to the grubby, necessarily devious world of intelligence." From card file mentalities to Chiefs of Station not speaking the language, to off-the-cuff decision making and a refusal to include CIA analysts in strategic deliberations, this is an accurate and important study that has not gotten the attention it merits from the media or the oversight staffs.

West, Nigel, *The SIGINT Secrets: The Signals Intelligence War, 1900 to Today* (William Morrow, 1988).

Nigel has given us a lovely history, and also drawn out a number of themes that have meaning for the future. For instance, the superiority of amateurs from the ham radio ranks over the so-called professional military communications personnel, in the tricky business of breaking patterns and codes; the many "human in the loop" breaks of otherwise unbreakable technical codes, from the Italians with hemorrhoids (not in the code book, spelling it each day broke the code) to the careless Russians. He also touches on security cases in both the U.S. and England. In his conclusion, one sentence jumped out at me: "The old spirit of RSS, with its emphasis on voluntary effort, has been replaced by a bureaucracy of civil servants who preferred to stifle, rather than encourage, initiative." As the current Director of NSA has discovered, NSA today is in mental grid lock, and its culture is oppressive in the extreme.

Intelligence, Counter

Adams, James, *SELL OUT: Aldrich Ames and the Corruption of the CIA* (Viking, 1995).

In this instance I choose to use the following from the book itself: "*Sellout* is the story of America's intelligence community, a community so determined to protect its own, to never admit failure, that it failed to catch Ames, whose spying was done with as much sloppiness as his work for the Agency. The turf wars between the CIA and the FBI and the incompetence of the investigators would mean that the investigation would get nowhere for nearly nine years." During those nine years, Ames rose to become head of the CIA's Soviet Division counterintelligence function, and was able to identify, by name, all of the U.S. penetrations then active within the Soviet Union. All of them are believed to have been executed.

Allen, Thomas B. and Norman Polmar., *Merchants of Treason: American Secrets for Sale* (Dell, 1988).

Roughly 100 American traitors, most of them within the U.S. defense establishment, are itemized in this book, the only such over-all review I have encountered. As I have said on several occasions that I believe we have at least 500-750 additional cases of espionage to discover, at least half of them controlled by our "allies", this book is for me a helpful reminder of the true pervasiveness of betrayal in a Nation where opportunism and financial gain often outweigh loyalty and principle.

Martin, David C., *Wilderness of Mirrors* (Harper & Row, 1980).

This book goes a long way toward explaining CIA's intellectual and operational constipation in the 1950's through the 1970's. It follows James Jesus Angleton, who tied the Agency in knots and went so far as to privately tell the French that the CIA Station Chief in Paris was a Soviet spy, and William King Harvey, who literally carried two six-guns both in the US and overseas "because you never know when you might need them." Included in this book are some serious details about the operations against Cuba, a chapter appropriated titled "Murder Corrupts", and a good account of how Harvey, in perhaps his most important achievement, smelled out the fact that Kim Philby was indeed a Soviet spy. The concluding thought of the book is exceptional: "Immersed in duplicity and insulated by secrecy, they (Angleton and Harvey) developed survival mechanisms and behavior patterns that by any rational standard were bizarre. The forced inbreeding of secrecy spawned mutant deeds and thoughts. Loyalty demanded dishonesty, and duty was a thieves' game. The game attracted strange men and slowly twisted them until something snapped. There were no winners or losers in this game, only victims."

Riebling, Mark, *WEDGE: The Secret War Between the FBI and the CIA* (Alfred A. Knoph, 1994).

I cannot do this book justice, other than to say that I had never understood the depth and stupidity of the bureaucratic hostility between the FBI and the CIA—mostly the fault of the CIA these days but certainly inspired in part by Hoover in the early days—until I read this book; and that it should be required reading for every senior CIA manager. From the FBI's failure to communicate its very early knowledge of Japanese collection requirement on Pearl Harbor via the Germans, to the assassination of President Kennedy, the World Trade Center bombing and the Aldrich Ames case, this book makes me ashamed and angry about how bureaucracy and secrecy subvert loyalty, integrity, and common professional sense on both sides of this "wedgie" contest.

Roson, William R., Susan B. Trento, and Joseph J. Trento, *WIDOWS* (Crown, 1989).

"Four American spies, the wives they left behind, and the KGB's crippling of American intelligence." Naturally containing a great deal of bitterness, this is still a worthwhile detailed overview of our national unwillingness to get serious about counterintelligence, and the human cost this failure entails. Especially good on the culture of deception that sets integrity aside in favor of protecting the bureaucracy.

Simpson, Christopher, *BLOWBACK: America's Recruitment of Nazis and Its Effects on the Cold War* (Weidenfeld & Nicholson, 1988).

Very scary stuff. The bottom line is that for the sake of enhancing national security and national competitiveness, the U.S. Government, with approval from the highest levels, funded the wholesale introduction into U.S. citizenship of both Nazi scientists and Nazi participants in genocidal programs who were viewed in many cases as "essential" to our anti-Communist endeavors. The loss of perspective among selected senior intelligence and policy officials, and the long-term influence of this program on our obsession with Communism, give one pause.

Intelligence, Covert Action and Paramilitary

Bittman, Ladislav, *The Deception Game* (Ballentine, 1972).

I have found no better primer on disinformation, propaganda, and influence operations than this paperback.

Corn, David, *BLOND GHOST: Ted Shackley and the CIA's Crusades* (Simon & Schuster, 1994).

Although Ted Shackley was a line case officer, this book is placed within the paramilitary section because his entire career encompassed a series of wars where the CIA played a very tragic and unproductive role. As Shackley's deputy in Laos is quoted on page 163, speaking on Shakley's accomplishments in Laos, "We spent a lot of money and got a lot of people killed," Lair remembered, "and we didn't get much for it." For those seeking to understand the bureaucratization of the Directorate of Operations, both in the field and in Washington, this is essential reading.

Levine, Michael, *DEEP COVER: The Inside Story of How DEA Infighting, Incompetence and Subterfuge Lost Us the Biggest Battle of the Drug War* (Delacorte, 1990).

Above all, this book is a credible indictment of how Washington bureaucracy and political posturing, combined with mediocre intelligence and a determined policy of trying to reduce drug supplies instead of reducing drug consumption, have made a huge mockery of the "war on drugs." There is another underlying theme, that of how the drug war is corrupting our own officers, who either go bad or cast a blind eye as contractors fly drugs into the US enroute to Europe, where they trade them for arms that are then sold to the contras or others at inflated prices CIA is happy to pay.

Stockwell, John, *In Search of Enemies: A CIA Story* (W.W. Norton, 1978).

By the former Chief of the Angola Task Force at CIA, this book is a classic on the Keystone Kops aspects of paramilitary operations as run by the CIA"s Special Operations Group within the Directorate of Intelligence, as well as the lack of contextual judgment that accompanies the CIA's decisions to "get into" local conflicts that are none of our business. Ammunition from the warehouses that doesn't fit the weapons in the field is just the beginning.

Valentine, Douglas, *The PHOENIX Program* (William Morrow, 1990).

This is as good an account I have found of how the CIA got into the business of helping Vietnamese kill each other off one by one. It is a disturbing and valuable book, and I took from it several lessons: 1) CIA puppies with no military background, and military detailees with no law enforcement background, have no business getting into the gutter with foreign thugs; 2) if we support indigenous arrest, torture, and assassination programs they need to have some serious multi-cultural analysis and counterintelligence support lest we simply give one faction the means of killing off the other without regard to our interests; and 3) our general approach to interference in the internal affairs of other nations is corrupt and increases local corruption. We throw money at personalities rather than insight at institutions. We train and equip local units to inflict covert violence, and then wonder why the situation destabilizes further.

Woodward, Bob, *The Secret Wars of the CIA: 1981-1987* (Pocket Books, 1987).

The inadequacy of human sources, the inability of the Directorate of Operations to focus on *internal* threats to the regimes they were helping, the lack of DO knowledge about the international arms market and related financing arrangements, exorbitant payments to agents ($90,000 a year for one senior policeman in El Salvador, this in late 1970 dollars), the bureaucratic infighting (the DO trying to steal a good open source from Adm Inman, then burning the source with the Swedish police when Inman objected)—these are just a few of the gems in this well-documented book. On balance it does not suggest an end to covert action, but rather the need for increased competence.

Intelligence, Economic Espionage

Fialka, John, *War by Other Means: Economic Espionage in America* (W. W. Norton, 1997).

John is a distinguished correspondent for the *Wall Street Journal*, their lead reporter during the Gulf War, and an award-winning investigative journalist in the fields of national security, politics, and financial scandal. The Chinese, Japanese, French and Russians are featured here, together with useful cross-overs into criminal gangs doing espionage on U.S. corporations, as well as overt data mining and other quasi-legal activities that yield far more economic intelligence than most business leaders understand.

Guisnel, Jean, *Cyberwars: Espionage on the Internet* (Plenum Trade, 1997).

Jean, a nationally-respected journalist in France who has covered espionage matters for decades, is the author of one of those rare French books that make it into the U.S. marketplace. Translated into English after great reviews in Europe, it charts the migration of European and Anglo-Saxon intelligence professionals into cyber-space.

Schweizer, Peter, *FRIENDLY SPIES: How America's Allies are Using Economic Espionage to Steal Our Secrets* (Atlantic Monthly, 1993).

One hundred billion dollars annually is one White House estimate of the cost to U.S. businesses imposed by economic espionage carried out predominantly by our allies—France, Israel, Germany, South Korea, and Japan being among the top culprits. Peter Schweizer was the first to really put this issue on the table, and he deserves a lot of credit. Neither Congress nor the Administration are yet prepared to take this issue seriously, and this is a grave mistake, for in the 21st Century information is the seed corn of prosperity, and our allies are eating our seed corn.

Winkler, Ira, *CORPORATE ESPIONAGE: What It Is; Why It's Happening to Your Company; What You Must Do About It* (Prima, 1997)

Ira, a former National Security Agency professional, made a name for himself in his second career as a corporate electronic security specialist by using a combination of common sense and basic work-arounds to penetrate and download millions if not billions of dollars worth of corporate research and development—always at the company's request, and generally with astonishing results. From his antics as a "temp" hire gaining access within two days, to his more systematic attacks using all known vulnerabilities including factory-shipped system administrator passwords that were

never changed, he has exposed in a very practical way the "naked emperor" status of corporate America.

Intelligence, Foreign Capabilities

Andrew, Christopher and Oleg Gordievsky, *Instructions from the Centre: Top Secret Files on KGB Foreign Operations, 1975-1985* (Scepter UK, 1991)

Imagine the CIA clandestine mentality and U.S. bureaucracy, as operated by a Soviet-style controlled regime. This is an eye-glazing but very professionally put together testimonial to the fact that much of what the KGB did was pedestrian, pointless, very expensive, and as weak on understanding foreign countries as the US.

Bergin, Anthony and Robert Hall, *Intelligence and Australian National Security* (Australian Defence Studies Centre1994)

We don't see enough books in English on other intelligence communities, in part because they are not often published, in part because we are all very insular. This book groups a number of excellent articles into several major sections dealing with policy, operational intelligence, the wider concept of security, the limits of openness, economic and commercial intelligence, and intelligence requirements for international regimes. The four appendices on intelligence sources are a real disappointment, as they reflect more than anything just how narrowly read most authors on intelligence actually are.

Eftimiades, Nicholas, *Chinese Intelligence Operations* (Naval Institute Press, 1994)

Nick is an experienced sinologist who has worked at the Department of State, CIA, and DIA, and is also a naval reserve officer. His book is well-organized, well-researched, and essential reading for those who would understand how comprehensively the Chinese seek out scientific, technical, and military information in the United States, with a special emphasis on open sources of intelligence.

Hager, Nicky, *Secret Power: New Zealand's Role in the International Spy Network* (Craig Potton NZ, 1996).

This is a wonderful book about New Zealand's signals intelligence service, as good as the *Puzzle Palace* in its own way. Especially charming is the three-dimensional figure of the signals intelligence headquarters showing precisely what functions are on each end of each floor. The two most sensational revelations in this book are that the computers doing the signals targeting are controlled by the Americans and there is no New Zealand oversight or even understanding of what profiles the Americans are

installing; and that the signals intelligence service made a deliberate decision not to inform the Prime Minister at the time when they first bought into being an extension of the U.S. signals intelligence empire.

Kalugin, Oleg, *The First Directorate: My 32 Years in Intelligence and Espionage Against the West* (St. Martin's Press, 1994).

Oleg, now a green-card resident of the U.S. is our most personable and enjoyable former opponent on the intelligence speaking circuit, and both Bill Colby and I supported him in his efforts to move permanently to America. His book is a marvelous account on the general details of his formidable career that culminated in his being elected to the Russian Parliament. Page 222, "Kill the dog!", has a special meaning for professionals the world over.

Ostrovsky, Victor with Claire Hoy, *By Way of Deception: The Making and Unmaking of a Mossad Officer* (St. Martin's Press, 1990).

One of my atmospherics books, enjoyable for its description of Mossad training exercises for new Career Trainees, and for its insights into how Israeli fully integrates military assistance carrots and clandestine intelligence follow-ups. Some insights into Mossad's deliberate manipulation of U.S. intelligence and a few allegations regarding U.S. hostage situations where Mossad might have done more but chose not to.

Richelson, Jeffrey T., *Foreign Intelligence Organizations* (Ballinger, 1988).

An essential reference. Focuses on major countries. Needs a companion volume for the smaller powers including Ghana of all places, where a CIA employee was successfully recruited by the "backward" local service.

Sheymov, Victor, *Tower of Secrets: A Real Life Spy Thriller* (Naval Institute Press, 1993).

This book is fun. It provides a look at the career of a KGB officer with a level of detail that makes one thing abundantly clear: the KGB and CIA are more alike than one might think, for the simply reason that they are both bureaucracies. Smoothly presented, enjoyable throughout.

Intelligence, History

Chalou, George C. (ed.), *The Secrets War: The Office of Strategic Services in World War II* (National Archives and Records Administration, 1992).

Twenty four distinguished authors, including Sir Robin Brook from England and William Colby, an original serving member of the OSS and later DCI, provide a really well-developed history of the OSS with special sections on OSS records and OSS research, as well as grouped contributions on OSS operations in various regional areas and reflections on *today's* circumstances. One contributor, Robin Winks, concludes that US intelligence (CIA) is not getting "the right stuff" now for four interlocking reasons: 1) academia by and large no longer cooperates with the intelligence community; 2) academia lost its interest in being helpful when it became apparent that the covert action tail was wagging the intelligence dog; 3) the intelligence community, apprehensive about recruiting from open institutions permitting violent war protests, made the clearance process so convoluted that it began averaging eighteen months; and 4) the agency began to recruit people who badly wanted to join and were willing to put up with a recruitment and clearance process that the best Yale students, the ones who withdrew from consideration, described as "curious, stupid, degrading, and off-putting", with the result that the agency ultimate lost access to "the self-assured, the confident, the questioning, and the adventurous—precisely the qualities that has been so attractive to the OSS—in the process." I myself know from discussions with the head of the office responsible for evaluating incoming Career Trainees, that the standard profile of a desirable candidate has always been "the company man" who goes along, except in two years—1979 and 1982—when they went after "self-starters." Within five years, both those classes lost fifty percent of their numbers to resignation, and I believe that this problem continues to persist. I was in the 1979 class, and hung in there for nine years.

Johnson, Lock K., *A Season of Inquiry: The Senate Intelligence Investigation* (University Press of Kentucky, 1985).

"You see, the way a free government works, there's got to be a housecleaning every now and then." Harry Truman, as cited on the first page of the book. Well, in the U.S. Government, before you get a real housecleaning, it appears you have to build the vacuum cleaner from scratch every few years, and even then you only get the big dirt on the margins. This book is a very important book with all the more value today as we finally get serious about intelligence reform. Loch's professional and extraordinarily detailed account of the entire Church Committee investigation, its findings, White House attempts to avoid reform, and the rather bland outcomes that finally resulted, should be considered the key to understanding where we are today and why we so desperately need legislation to achieve substantive reform. Had Senator Church been chosen by Jimmy Carter as Vice President (Church was favored by the convention, with Mondale and Stevenson tied behind him), who knows what good might have come of his White House service.

Persico, Joseph E., *CASEY—The Lives and Secrets of William J. Casey: From the OSS to the CIA* (Viking, 1990).

Persico has done a wonderful job of capturing Casey's magnificent complexity and intellectual voraciousness. Oddly enough the best quote in there, part of a really excellent over-all description of why the DO does not succeed, comes from Herb Meyer when he was a special assistant to Casey: "These guys have built a system that shuts them off from any intelligence except what you can steal. These people needed to be reconnected to reality."

Westerfield, H. Bradford (ed.), *inside CIA's private world* (Yale, 1995).

Brad, a respected scholar in his own right, was given unique access to all past publications of the CIA's internal journal, *Studies in Intelligence*, and has produced an absolutely lovely collection of the best thoughts inside CIA from 1955-1992, organized into sections for imagery intelligence collection, overt human intelligence collection, clandestine human intelligence collection, human intelligence and its consumers, the analysis function, analysis and its consumers, and counterespionage. I regard this book as an essential supplementary reading for teaching both students and practitioners.

Intelligence, Military

DeForest, Orin, *SLOW BURN: The Rise and Bitter Fall of American Intelligence in Vietnam* (Simon & Schuster, 1990)

This is one of two books I regard as essential to an understanding of our intelligence failures in Viet-Nam. DeForrest was a former military enlisted man who ended up managing a great deal of the prisoner interrogation for a major Agency facility in-country. His story ties together a number of important themes, from the failure of Ivy League types to understand what they were dealing with to the inadequacies (and sometimes the superiority) of vast numbers of "contract" case officers who would normally not have been hired, to the very real value of systematically debriefing all prisoners and entering the results into a database amenable to search and retrieval, something we don't know how to do today. Across every major military operation since Viet-Nam, it has been my experience that we have no table of organization and equipment, completely inadequate numbers of trained interrogators and translators, and no commitment to the tedious but essential work of extracting knowledge from large numbers of hostile prisoners.

Jones, Bruce E., *War Without Windows* (Berkeley, 1987).

Sam Adams may be more famous as the whistle-blower on CIA and U.S. military falsification of the numbers of Viet Cong and regular North Vietnamese army personnel confronting the U.S. in Viet-Nam, but this book is the very best account I have found of the intimate details of how politics, bureaucracy, bad judgment, and some plain

downright lying falsified the military intelligence process at all levels of the U.S. military in Viet-Nam.

Katz, Samuel M., *Soldier Spies: Israeli Military Intelligence* (Presidio, 1992).

This is a very fine book about the minutia and the value of a well-rounded military intelligence capability. I was especially impressed by four aspects: the emphasis on prisoner interrogation, the development of easy to install tactical signals collection devices that could be carried in by deep reconnaissance units; the over-all commitment to long-range patrolling; and the commitment to "behind the lines" covert violence using all the tools of intelligence to identify and kill very specific people such as two Egyptian Colonels believed to be guiding Palestinian terrorist actions against Israel. These are all areas where the Americans are very weak, and I consider this book a very helpful "manual" for military commanders who want to take a more active role in guiding defense intelligence into the future.

Mangold, Tom and John Penycate, *The Tunnels of Chu Chi* (Berkeley, 1985). This is required reading for every commander and every staff officer, and for every intelligence professional, both at the entry-level and at mid-career. Two things really hit home from this book: 1) the fact that we were completely clueless about the physical, mental, and cultural toughness and dedication of the Vietnamese who opposed our interference in Viet-Nam; 2) the fact that we are completely unable to detect tunnels under our base camps or in the tactical environment (although new technology is coming along). They dug 200 miles of tunnels by hand, including extensive networks under the major Bien Hoa complex.

Wirtz, James J., *The Tet Offensive: Intelligence Failure in War* (Cornell, 1991).

Jim, a very respected member of the faculty at the Naval Postgraduate School, has provided us with a very well documented study of how the U.S. missed the Tet Offensive in Viet-Name. Among his findings: we knew fully two months in advance at the tactical collection level, with several additional collection successes and some modest analysis successes in the weeks preceding the offensive. We were distracted by Khe Sanh, the commanders did not want to hear it, "intelligence to please" was the standard within the Military Assistance Command Viet-Nam intelligence bureaucracy, and when we finally did grasp, one day before the attack, its true strategic nature, we failed to disseminate the warnings to the tactical commanders with sufficient effectiveness.

Intelligence, Policy

Andrew, Christopher *For the President's Eyes Only: Secret Intelligence and the American Presidency from Washington to Bush* (HarperCollins, 1995).

"Over the past two centuries only four American presidents—Washington, Eisenhower, Kennedy (briefly), and Bush—have shown a real flair for intelligence." This 660-page book documents this assessment, and ends with the conclusion "The presidents in the twenty-first century, like their Cold War predecessors, will continue to find an enormously expensive global intelligence system both fallible and indispensable." His general findings in the conclusion are instructive: presidents have tended to have exaggerated expectations of intelligence, and have frequently overestimated the secret power that covert action might put at their command. For all that failed, both in intelligence not getting it right and presidents not listening when it did, intelligence undeniably helped stabilize the Cold War and avoid many confrontations.

Gates, Robert M., *From the Shadows: The Ultimate Insider's Story of Five Presidents and How They Won the Cold War* (Simon & Schuster, 1996).

I wore out one fountain pen on this book. Bob Gates has served his country, and five presidents, as earnestly and capably as anyone might, and there is much to learn from this book. The level of detail is quite good. He is very critical of the Directorate of Operations for both misbehavior and a lack of management control in relation to Central America, and as one who was there I have to say, he is absolutely right. We disagree on the point of intelligence (he would say, "secrets for the president", I would say "knowledge for the Nation") but I believe we would agree on this: intelligence is important, and intelligence merits deep and sustained interest by the President.

Intelligence, Reform and Future

20th Century Fund, *In From the Cold: The Report of the Twentieth Century Fund Task Force on The Future of U.S. Intelligence* (with papers by Allan E. Goodman, Gregory Treverton, and Philip Zelikow, 1996)

The Director of Central Intelligence now serving refuses to accept the word "reform" and persists in the traditionalist view that only incremental change is needed within the U.S. Intelligence Community. This book, by a very respected team of private sector authorities with experience in the business of intelligence opens by noting that "informed opinion overwhelmingly holds that many of the important questions about the intelligence agencies have yet to be addressed." Their book, and mine, and the books coming out this year by Greg Treverton, the team of Bruce Berkowitz and Allan Goodman, and a group of ten authors including Mel Goodman and Bob White, are part

of the responsible effort from the private sector to get the incoming President and the incoming Congress to finally accept their own responsibility for engaging these issues and legislating reform that will never come from within the U.S. Intelligence Community if it is left to its own devices and inclinations.

Adams, James, *The New Spies: Exploring the Frontiers of Espionage* (Hutchinson, 1994).

By the (UK) *Sunday Times* Bureau Chief in Washington, a former defense correspondent, I found this book somewhat disappointing but never-the-less worthy of consideration. Although the author concludes that the end of the Cold War should have produced a massive upheaval and did not, leaving "too many of the old practices intact with little evidence that the intelligence community is ready to face the fast changing, frightening world that lies ahead," my impression was that the author was completely taken in by the party line and overlooked most of the really trenchant intelligence reform literature, including the open source.

Agee, Philip, *Inside the Company: CIA Diary* (Bantam Books, 1975).

I despise what Philip Agee did with this book, endangering the lives of real people and violating his oath as a commissioned officer in the clandestine service. I was also very surprised by the level of detail in the book, and concluded that he intended to betray the CIA well prior to leaving. I've served three overseas tours and three Washington assignments, and from all that time I can barely remember one cryptonym series and not a single true identity. I think Agee took notes and planned ahead to burn the CIA. This is a good diary, and I include it in this bibliography to represent the pedestrian side of the DO—the day to day monotony of going through the motions and doing agent recruitments and agent handling operations in third world countries where the bulk of what one does really does not contribute to U.S. national security or understanding.

Berkowitz, Bruce D. and Allen E. Goodman, *BEST TRUTH: Intelligence in the Information Age* (Yale, 2000).

This book dedicates itself entirely to fixing the underlying process of intelligence. The authors place intelligence in the larger context of information, and draw a plethora of useful comparisons with emerging private sector capabilities and standards. They place strong emphasis on the emerging issues (not necessarily threats) related to ethnic, religious, and geopolitical confrontation, and are acutely sensitive to the new power of non-governmental organizations and non-state actors. The heart of their book is captured in three guidelines for the new process: focus on understanding the consumer's priorities; minimize the investment in fixed hardware and personnel; and create a system that can draw freely on commercial capabilities where applicable (as they often will be). Their chapter on the failure of the bureaucratic model for intelligence, and the

need to adopt the virtual model—one that permits analysts to draw at will on diverse open sources—is well presented and compelling. Their concluding three chapters on analysis, covert action, and secrecy are solid professional-level discussions of where we must go in the future.

Eisendrath, Craig (ed.), *National Insecurity: U.S. Intelligence After the Cold War* (Temple University Press, 2000).

A project by the Center for International Policy, founded by Senator Tom Harkin (D-Iowa), this book brings together a series of chapters that are largely anecdotal (but reasoned) pieces from former foreign service officers recalling all the terrible things CIA did or did not do while they were in service. It includes a chapter by Mel Goodman that some thought was to have been a full-blown book. The chapter by Richard A. Stubbing on "Improving the Output of Intelligence: Priorities, Managerial Changes, and Funding" is quite interesting. There is a great deal of truth in all that is presented here—Ambassador Bob White, for example, was in El Salvador when I reported, a graduate thesis on predicting (and preventing) revolution in my past, and I remember vividly our conversation about the need to suppress the extreme right if we were to stabilize the country.

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

This book has two good features—the author really does understand the personnel issues, and hence one can read between the lines for added value; and the book is as good an "insider" tour of the waterfront as one could ask for. How the book treats the CIA-FBI relationship, for example, is probably representative of how most CIA insiders feel. The book does not reflect a deep understanding of open sources and tends to accept the common wisdom across the intelligence bureaucracy, that all is "generally okay" and just a bit of change on the margin is necessary. In this respect, it is a good benchmark against which the more daring reformist books may be measured.

Johnson, Loch, *Bombs, Bugs, Drugs, and Thugs: Intelligence Challenges in the New Millenium* (New York University Press, 2000)

Above is the working title. Loch, the dean of intelligence reformers and unique for having served on both the Church Committee and the Aspin/Brown Commission professional staffs, addresses in his book the difficulties of conducting intelligence in the post-cold war era and suggests some new ideas for overcoming the current downward trends in both coverage and effectiveness. Although I have not seen this book yet, I am compelled to ensure that it is listed, for Loch is by all measures the longest serving, most committed, and most gracious of the loyal intelligence reformers.

Marchetti, Victor and John D. Marks, *The CIA and the Cult of Intelligence* (Laurel, 1980).

This is one of perhaps ten books from prior to 1985 that I decided to include because of their continuing value. I believe that both history and historians will credit these two individuals with having made a difference by articulating so ably both the clandestine mentality and the problems extant in the lack of oversight regarding proprietary organizations, propaganda and disinformation, and intrusive not-so-clandestine operations.

Moynihan, Daniel Patrick, *Secrecy: The American Experience* (Yale, 1998)

Senator Moynihan applies his intellect and his strong academic and historical bent to examine the U.S. experience with secrecy, beginning with its early distrust of ethnic minorities. He applies his social science frames of reference to discuss secrecy as a form of regulation and secrecy as a form of ritual, both ultimately resulting in a deepening of the inherent tendency of bureaucracy to create and keep secrets—secrecy as the cultural norm. His historical overview, current right up to 1998, is replete with documented examples of how secrecy may have facilitated selected national security decisions in the short-run, but in the long run these decisions were not only found to have been wrong for lack of accurate open information that was dismissed for being open, but also harmful to the democratic fabric, in that they tended to lead to conspiracy theories and other forms of public distancing from the federal government. He concludes: "The central fact is that we live today in an Information Age. Open sources give us the vast majority of what we need to know in order to make intelligent decisions. Decisions made by people at ease with disagreement and ambiguity and tentativeness. Decisions made by those who understand how to exploit the wealth and diversity of publicly available information, who no longer simply assume that clandestine collection—that is, 'stealing secrets'—equals greater intelligence. *Analysis*, far more than secrecy, is the key to security....Secrecy is for losers."

Treverton, Gregory F., *Reshaping Intelligence for an Age of Information* (Cambridge, 2000)

Greg, both a distinguished academic and the former Vice Chairman of the National Intelligence Council, has given us a thoughtful examination of both the premises and objectives of national intelligence. As Greg puts it, "Then, the world was one of a single predominant target, the Soviet Union, of too little information, most of which -- spy reports and satellite photos -- was both "owned" by intelligence and regarded as reliable. Now, intelligence has many targets, not one, many customers -- including foreign governments and private citizens -- not few, and and too much information, not too little, but of widely varying reliablility. Collecting information used to be the

problem; now selecting and validating it is the task. U.S. intelligence used to think it was in the secrets business, but now it is in the information business. It needs to be decentralized and opened; it used to wall itself off in compartments lest secrets seep out, but now it needs to be opened—to think-tanks, NGOs, academics and Wall Street—lest the information that is out there in the world not seep in."

Turner, Stansfield, *Secrecy and Democracy: The CIA in Transition* (Harper & Row, 1985).

Stansfield Turner was a Rhodes scholar and naval officer who rose to command of a carrier task group, a fleet, NATO's southern flank, and the Navy's most prestigious intellectual institution, the Naval War College. He served from 1977-1981 as Director of Central Intelligence under President Jimmy Carter, and his book in my mind was the first serious contribution—perhaps even a catalyst—to the growing debate over whether and how much reform is required if the U.S. Intelligence Community is to be effective in the 21st Century. His eleven-point agenda for reform is of lasting value, as are his ideas for intelligence support to those responsible for natural disaster relief and other non-military challenges.

Zegart, Amy B., *Flawed By Design: The Evolution of the CIA, JCS, and NSC* (Stanford, 1999).

This is a very worthy and thoughtful book. It breaks new ground in understanding the bureaucratic and political realities that surrounded the emergence of the National Security Council, the Joint Chiefs of Staff, and the Central Intelligence Agency. The CIA was weak by design, strongly opposed by the military services from the beginning. Its covert activities emerged as a Presidential prerogative, unopposed by others in part because it kept CIA from being effective at coordinated analysis, for which it had neither the power nor the talent. Most usefully, the book presents a new institutionalist theory of bureaucracy that gives full weight to the original design, the political players including the bureaucrats themselves, and external events. Unlike domestic agencies that have strong interest groups, open information, legislative domain, and unconnected bureaucracies, the author finds that national security agencies, being characterized by weak interest groups, secrecy, executive domain, and connected bureaucracies, evolve differently from other bureaucracies, and are much harder to reform. On balance, the author finds that intelligence *per se*, in contrast to defense or domestic issues, is simply not worth the time and Presidential political capital needed to fix *but* that if reform is in the air, the President should either pound on the table and put the full weight of their office behind a substantive reform proposal, or walk away from any reform at all—the middle road will not successful.

Management, Acquisition

I'm not going to review these books, simply because this is not my area of expertise and I want to use them as passing examples of what may be the single most important area where intelligence, properly done, and management, properly exercised, could save up to $50 billion or more a year—perhaps as much as $100 billion across the entire government.

Fishner, Stanley, *A Report on Government Procurement Practices: What's Needed to Reverse the Trend* (Camelot Publishers, 1989).

Fox, J. Ronald, *The Defense Management Challenge: Weapons Acquisition* ((Harvard, 1988).

Mullins, James P., *The Defense Matrix: National Preparedness and the Military-Industrial Complex* (Avant, 1986).

Stewart, Rod and Annie, *Managing Millions: An Inside Look at High-Tech Government Spending* (John Wiley, 1988).

Tolchin, Martin and Susan J., *Selling Our Security: The Erosion of America's Assets* (Alfred A. Knopf, 1992).

Weiner, Tim, *Blank Check: The Pentagon's Black Budget* (Warner, 1990).

Management, Future

Abshire, David M., *Preventing World War III: A Realistic Grand Strategy* (Harper & Row, 1988).

This book, apart from being the world's longest job description (for a Counselor to the President for Grand Strategy), remains a vibrant and provocative discussion relevant to guiding the Nation into the 21st Century. Part I discusses the "world theater" and Part II discusses in turn a grand strategy and then political, public, deterrence, negotiating, resources, technology, Third World, and economic strategies. The book ends with thoughts on organizing for strategy that should, because of who wrote them and how good they are, be required reading, in their twelve-page entirety, for the President and his entire Cabinet team.

Friedman, George and Meredith, *The Future of War: Power, Technology and American World Dominance in the Twenty-First Century* (St. Martin's, 1996).

The authors begin by noting that there is "a deep chasm between the advent of technology and its full implementation in doctrine and strategy." In their history of failure they note how conventional wisdom always seems to appreciate the systems that won the past wars, and observes that in the U.S. military there is a long history of transferring power from the political and military leadership to the technical and acquisition managers, all of whom have no real understanding of the current and future needs of the men who will actually fight. They address America's vulnerability in both U.S. based logistics and in overseas transport means—"Destroying even a portion of American supply vessels could so disrupt the tempo of a logistical build-up as to delay offensive operations indefinitely." They have a marvelous section on the weaknesses of U.S. data gathering tools, noting for example that satellites provide only a *static* picture of one very small portion of the battlefield, rather that the wide-area and dynamic "situational awareness" that everyone agrees is necessary. They go on to gore other sacred oxes, including the Navy's giant ships such as the carrier (and implicitly the new LPH for Marines as well as the ill-conceived arsenal ship) and the largest of the aircraft proposed by the Air Force. They ultimately conclude that the future of war demands manned space stations that are able to integrate total views of the world with control of intercontinental precision systems, combined with a complete restructuring of the ground forces (most of which will be employed at the squad level) and a substantial restructuring of our navel force to provide for many small fast platforms able to swarm into coastal areas.

Modis, Theodore, *Predictions: Society's Telltale Signature Reveals the Past and Forecasts the Future* (Simon & Schuster, 1992).

Or, everything you ever wanted to know about the S-curve and why it all makes sense in the end. This book is about creativity, competition, and the natural order of things. Mutants are most important during times of violent change (the end of a paradigm) when they offer substantial variation from the non-workable past and hence improve the shift toward survival by being more fit for the new circumstances. Interestingly, each successive transport infrastructure (canals to rails to roads to airways) provides an order of magnitude improvement in productivity. One could consider the personal computer and modem a way station on this trend, with networking and true global collaborative work tools as the next node. In the life spiral of change 1996 is the center of a "charging" period with new order and new technology, and will lead to tension and grow in the 2000-2010 period followed by a discharge boom and then relaxation and recession in the 2010-2020 period. Pollution is the next "global war" that needs to be fought, and we will not have a global village until we can reduce the travel time between any two points anywhere to 70 minutes and a cumulative cost for a year of such travel to 15% of the average global income.

Petersen, John L., *Out of the Blue: Wild Cards and Other Big Future Surprises* (Arlington Institute, 1997).

John lays out 78 "wild card" scenarios in this book that are, literally, "earth-shaking." For me the book was a litmus test for the relevance and structure of national intelligence and the answer is not pretty. By and large, across every single major issue of fundamental importance to national security and prosperity, from the collapse of world fisheries to epidemic disease jumping from Africa to Europe to the USA to developments in energy, religion, migration, and climate, the U.S. Intelligence Community is neither ready nor relevant. This is something we have to change.

Scales, Robert H. Jr., *Firepower in Limited War* (Presidio, 1995).

Major General Bob Scales may well be the Army's brightest light and this generation's successor to General Don Starry and Dan Morelli (who inspired the Toffler's book on *War and Anti-War*). First published by the National Defense University Press in 1990, this book reflects deeply on the limitations of firepower in limited war situations, and the conclusion is a telling indictment of our national intelligence community and our joint military intelligence community, neither of which is willing to break out of their little boxes to find a proper response to this statement: "The common theme in all five case studies presented here is the recurring inability of the side with the firepower advantage to find the enemy with sufficient timeliness and accuracy to exploit that advantage fully and efficiently."

Scales, Robert H. Jr., *Future Warfare: Anthology* (U.S. Army War College, April 1999).

This book is a compendium of his thinking on the future of war, and I will summarize just one train of thought that he presents: it places great emphasis on "global scouts" as the foundation for everything, followed by forward-deployed forces, pre-emption forces, and projection forces based in the US. Trust, not technology, sustains coalitions and wins wars. I would add the observation that trust comes from shared intelligence, not from shared technology.

Simpkin, Richard E., *Race to the Swift: Thoughts on Twenty-First Century Warfare* (Brassey's UK, 1988).

First published in 1985, Brigadier Simpkin's book has a forward from General Donn Starry and another from MajGen Perry Smith, USAF (Ret.) and one of our best strategic thinkers. It is the best book I have found to date with which to begin any discussion about the future of warfare. This was the book that inspired my conceptualization of the four warrior classes and also deepened my understanding of

the relationships between mobility, accuracy, intelligence, tempo, mass, politics, and cost.

Toffler, Alvin and Heidi, *War and Anti-War: Survival at the Dawn of the 21st Century* (Little Brown, 1993).

900 copies of this book were handed out at OSS '94 when the Tofflers were our keynote speakers, and it's hard to do anything other than praise a book with a chapter on "The Future of the Spy" built around OSS and my vision. With that disclosure, I will offer the observation that this book, which has gotten enormous attention within the U.S. military, is an excellent companion to Brigadier Simpkin's book, and the two, perhaps with General Scale's book, could be used to drive any graduate-level course on structuring a future warfighting *and peacekeeping* force.

Management, Leadership

Gardner, Howard, *Leading Minds: An Anatomy of Leadership* (HarperCollins, 1995).

I bought this book sometime after concluding that national intelligence leadership needed to inspire and appeal to the citizens of the USA at large, rather than being so narrowly focused on staying out of trouble with Congress while collecting secrets. This book reviews leadership of both domains and nations, with case studies on Margaret Mead (Culture), J. Robert Oppenheimer (Physics), Robert Maynard Hutchins (Education), Alfred P. Sloan, Jr. (Business), George C. Marshall (Military), Pope John XXII (Religion), Eleanor Roosevelt (Ordinariness and Extraordinariness), Martin Luther King (Minority) and Margaret Thatcher (National). The best leaders that emerge are those who are willing to confront authority and take risk, while also creating networks of contacts that number in the hundreds or thousands rather than tens. Most tellingly, aleader in a discipline (e.g. intelligence) only emerges as a long-term leader if he finally realizes that "he is more likely to achieve his personal goals or to satisfy his community if he addresses a wider audience than if he remains completely within a specific domain." The six constants of leadership are the story, the audience (beginning with a message for the unschooled mind), the organization, the embodiment, a choice between direct (more practical) and indirect (more reflective and often more enduring) leadership, and a paradox—the direct leaders often lack knowledge while the indirect leaders often have greater knowledge, and transferring knowledge from the indirect leader to the direct leader may be one of the central challenges and opportunities of the 21st Century.

Burns, James McGregor, *LEADERSHIP* (Harper, 1978).

This is an exhaustive examination of leadership beginning with its psychological, social, and political origins and then going on into reviews of transforming leadership (intellectual, reformist, revolutionary, and ideological) and transactions leadership (opinion, group, party, legislative, and executive). He concludes that leadership is a poorly-understood concept and that there is both demand and room to grow for future leaders. Leadership is collective, dissensual, causitive, morally purposeful, and elevating. At the end of the day, he has three rules: 1) don't assume your opponents, even Presidents, are too powerful to beat—in all probability they have feet of clay; and 2) integrate the views and needs of those to be led, or change will not occur; and 3) persist, and focus on the particular, and you will eventually prevail.

Management, Organizational

Drucker, Peter F., *Innovation and Entrepreneurship: Practice and Principles* (Harper & Row, 1985).

Drucker has a remarkable ability to deflate any self-styled entrepreneur and "innovator." His book discusses the sources of innovation, concluding rather significantly that knowledge-based innovation is rarely successful—that innovation generally works best when all the factors are known and put into new combinations that work exceedingly well—and that successful innovations start small, focus on the simplest element that can be understood by any half-wit, don't cost a lot, and are never grandiose.

Drucker, Peter F., *Post-Capitalist Society* (Harper, 1993).

Drucker and Toffler agree on one important idea: fiscal and monetary policy is no longer the real driver for national prosperity. At best it is a place-holder, a means of keeping the economy stable. There is a strong element of accountability throughout the book, first with respect to the managers of governments and corporations, and finally with the managers of schools that must ultimately be held accountable for producing students who are competent at both learning and sharing knowledge. For Drucker, the organization of the post-capitalist society must commit itself to being a *destabilizer* able to change constantly. "It must be organized for systematic abandonment of the established, the customary, the familiar, the comfortable—whether products, services, processes, human and social relationships, skills, or organizations themselves. It is the very nature of knowledge that it changes fast and that today's certainties will be tomorrow's absurdities." So speaketh Drucker of the U.S. Intelligence Community....

Farrell, Larry C., *Searching for the Spirit of Enterprise: Dismantling the Twentieth Century Corporation: Lessons from Asian, European, and American Entrepreneurs* (Dutton, 1993).

Excellent airplane book. Articulates concerns about business schools that disdain real business, for managers that count money instead of making it, and for governments that are complacent about the lack of an entrepreneurial culture within their business ranks. His general approach is to deconstruct companies into smaller units where the management can be close to the actual value-creation, there are simpler more honest relationships, and there is a combined sense of pride and urgency that increases the momentum and productivity of the group.

Hammer, Michael and James Champy, *Reengineering the Corporation: A Manifesto for Business Revolution* (HarperCollins, 1993).

This was the original "reengineering" book and rather than summarize the components of his process I will just name the one big "no no" that the current leadership of the U.S. Intelligence Community is passively pursuing...the most frequently committed error: "Try to fix a process instead of changing it."

Kantor, Rosabeth Moss, *The Change Masters: Innovation & Entrepreneurship in the American Corporation* (Simon & Schuster, 1983).

This book was meaningful to me because it documents the relationship between an open organizational environment, individual employee productivity, and innovation.

Kantor, Rosabeth Moss, *World Class: Thriving Locally in the Global Economy* (Simon & Schuster, 1995).

This book sparked my understanding of "community intelligence" and the need for an integrated network of civic leaders, corporate leaders, academic leaders, and social or non-profit leaders all sharing the same "intelligence" on what the threat to the local community is in terms of losing jobs and remaining attractive as an investment. The author boils it down to each community deciding if it is a thinker, a maker, or a trader community, and then setting out to ensure that everything about the community supports that specific kind of business at a "world-class" level.

Osborne, David and Peter Plastrik, *Banishing Bureaucracy: The Five Strategies for Reinventing Government* (Addison-Wesley, 1991).

Well, the Vice President loved it and the President bought into it, but it did not make a difference. As I document in Chapter 12, the National Performance Review identified a number of substantive objectives for intelligence reform, and the intelligence bureaucracy was successful in ignoring the White House. I suspect it has something to do with one of the fundamentals: "Unleash—but Harness—the Pioneers." The U.S. Intelligence Community can't stand pioneers unless they are spending billions of dollars on something really, really secret that has a high probability of failure. Reinvention

boils down to uncoupling or deconstructing a whole bunch of stuff, and then allowing the pieces to compete. It requires managers that can "let go" and employees that can "take hold." Above all, it requires openness and accountability....

Pinchot, Gifford & Elizabeth, *The End of Bureaucracy & The Rise of the Intelligent Organization* (Berrey-Koehler, 1993).

The seven essentials of organizational intelligence include widespread truth and rights; freedom of enterprise, liberated teams, equality and diversity, *voluntary learning networks*, democratic self-rule, and limited corporate government. It was this book, and the very strong applause that the author received from all those attending OSS '96, that caused me to realize that the U.S. Intelligence Community is just chock full of very good people that *want* to change, but are not being *allowed* to change by the organizational circumstances within which they are trapped—frozen in time and budget.

Senge, Peter M., *The Fifth Discipline: The Art & Practice of The Learning Organization* (Doubleday, 1990).

Without a shared vision there can be no shifting of minds, no team leaning, no local initiatives consistent with the shared vision, and so on. The U.S. Intelligence Community is confounded by its new circumstances, where commercial technology is better than spy technology, commercial sources are better (in the aggregate) than spy sources, and there is a real question as to whether anyone really cares whether the U.S. Intelligence Community exists or not. We need a vision for national intelligence that imparts two distinct values to each intelligence professional: first, a value as a member of a larger global community of experts, each of whom is dedicating to protecting the people and improving their lot; and second, a value as a member of an exclusive elite group of intelligence professionals dedicated to the dangerous and difficult profession of espionage. These are not contradictory values. We need a Director-General for National Intelligence (DGNI) able to impart this vision, not only to the employees across all the agencies, but to the President and Congress as well as the public.

Treacy, Michael & Fred Wiersema, *The Discipline of Market Leaders: Choose Your Customers, Narrow Your Focus, Dominate Your Market* (Addison-Wesley, 1995).

There are three disciplines discussed in this book: operational excellence, product leadership, and customer intimacy. The most important is customer intimacy. "For customer-intimate companies, the toughest challenge is to let go of current solutions and to move themselves and their clients to the next paradigm."