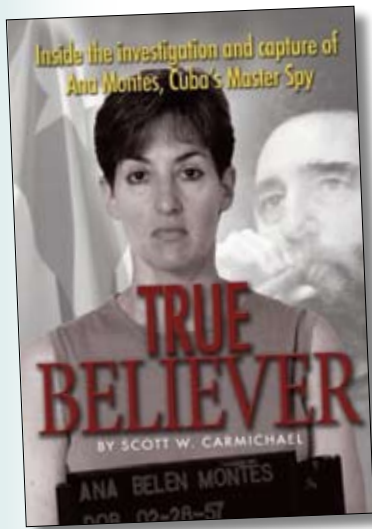
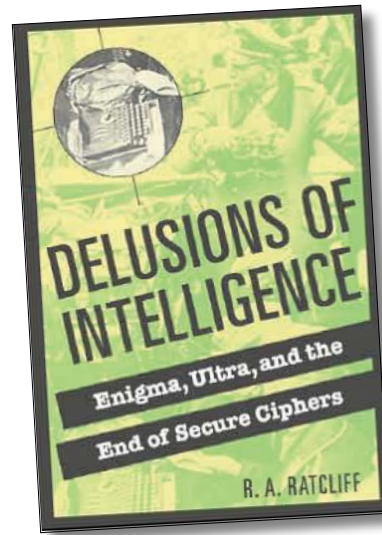


Off the Shelf

Intelligence is a precious commodity that nations seek to gather, protect, share, or distort, depending on the particular need at any given time. As described in this issue's Forum, the application of high technology to all aspects of intelligence collection and handling is changing the way consumers use this commodity. But technological gadgets are only as useful as the human elements designing them, operating them, and analyzing the information they collect. For every technology created to gather or protect intelligence, determined adversaries tend to find a way to defeat, overcome, or circumvent it. Low-tech methods of intelligence-gathering can cause high-value damage, and high-tech devices can be crippled by the power of the human brain.



True Believer:
Inside the Investigation and Capture of Ana Montes, Cuba's Master Spy
by Scott W. Carmichael
Annapolis, MD:
Naval Institute Press, 2007
187 pp. \$27.95
ISBN-13: 978-1-59114-100-6



Delusions of Intelligence:
Enigma, Ultra, and the End of Secure Ciphers
by R.A. Ratcliff
New York:
Cambridge University Press, 2006
313 pp. \$30.00
ISBN-13: 978-0-521-85522-8

On September 21, 2001, the Nation was still reeling from the terrorist attacks that occurred 10 days earlier. Thus, the arrest of Defense Intelligence Agency (DIA) analyst Ana Montes as a Cuban spy on that day garnered less attention than such an event normally would have. The timing of the arrest was not coincidental; Montes would have had access to information regarding the impending U.S. attack on Afghanistan—information that, had it reached Cuba, would “naturally have found its way to nations such as Russia, China, Libya, Iraq, Iran, Syria, North Korea, and potentially any country or political movement that opposes the United States” (p. 138).

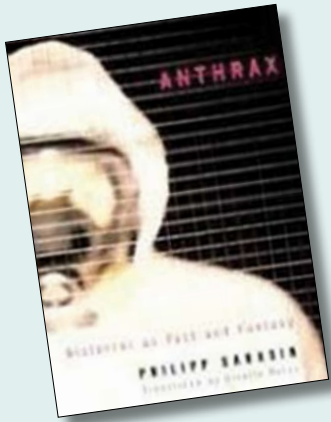
Technology no more sophisticated than a short-wave radio, a personal computer, and public pay phones allowed Montes to pass information to the Cuban government for 16 years. And technology as sophisticated as a polygraph, while known to be an inconclusive measure of guilt or innocence, was no match for Montes, who defeated a counterintelligence examination in 1994. Montes received taskings at her home via encrypted radio messages. Rather than smuggling material from DIA, she kept information in her head until she got home, where she recorded the day's events on a computer disk. Montes then passed the disks to her handler or used prepaid phone cards at public telephones to make operational calls to her handler's pager.

The author, Scott Carmichael, is the senior security and counterintelligence investigator at DIA; he was the lead agent on the Montes case from 1996, when she first came under suspicion, until her arrest in 2001. Using information that has come to light since Montes' arrest, Carmichael has been able to link her treachery to the death of SFC Gregory Fronius, USA, in El Salvador in 1987.

The full story of the Allied penetration of Germany's Enigma enciphering system before and during World War II started emerging in the 1970s, when the British government admitted to reading thousands of encrypted messages during the war—an admission that stunned many German cryptologic experts familiar with the system. Between its statistical complexity and the compartmentalization of information needed for its use, German confidence in Enigma's security was high. Despite offering 3×10^{14} possible combinations of letter substitutions, however, Enigma proved to be as unbreakable as the *Titanic* was unsinkable.

Ratcliff argues that “Enigma's defeat arose less from a technological flaw than from the systemic failure of an entire intelligence system” (p. 9). The same compartmentalization that the Germans touted as a security feature, combined with the lack of centralization in the Wehrmacht's intelligence-gathering apparatus, allowed the Allied penetration of Enigma to go undetected. In addition, long-term strategic intelligence was not a priority for the Germans, who reacted to problems rather than avoiding them in the first place. The nature of German society itself in the 1940s, in which admissions of error or acknowledgment of the possibility of compromise could end a career (if not a life), discouraged scientists from constructive criticism of Enigma's performance and security.

The reverse side of the coin was the Allied approach to cracking Enigma: a flexible, collaborative, sometimes combative, but ultimately successful effort. Ratcliff endorses the spirit of that Allied approach as we face modern-day security challenges: “Success will come to those who keep changing and adapting to new advances. Technology cannot solve our problems. Human brains do” (p. 236). —L. Yambrick



Anthrax:

Bioterror as Fact and Fantasy

by Philip Sarasin

Suhrkamp Verlag

Frankfurt am Main, 2004

Trans. Giselle Weiss

Cambridge and London:

Harvard University Press, 2006

322 pp. \$24.95

ISBN: 0-674-02346-3

Reviewed by

ZYGMUNT F. DEMBEK

Philip Sarasin, a professor of modern history at the University of Zurich, attempts to demonstrate that the threat of bioterrorism is disproportionate to our societal fears of such events—in part because media fascination with biological weapons has allowed reality to be influenced by fiction. Sarasin describes how the 1998 publication of Richard Preston's bioterrorism novel *The Cobra Event* became a cause célèbre that had a disproportionate influence. After President Bill Clinton read his novel, Preston was invited to appear in 1998 before the Senate Subcommittee on Technology, Terrorism, and Government Information, in a joint meeting with the Select Committee on Intelligence. Tom Clancy's bioterrorism novel *Rainbow Six*, in which bioterrorists fly in four airplanes from a base in Kansas, was also published in 1998. Both Preston's and Clancy's fictional works contained enough scientific facts to make their scenarios partially

plausible, as the authors had such information provided to them by subject matter experts. Subsequent meetings were held at the highest levels of the U.S. Government to address a lack of national preparedness for bioterrorism. And international concerns for bioterrorism certainly grew with the 1999 publication of the book *Biohazard*, a nonfiction account of the Soviet Union's biological weapons program, written by one of its former military chiefs, Ken Alibek (which Sarasin oddly omits as a source document).

Some of the more cogent points Sarasin makes are that modern Western society (especially the United States) has long had a morbid fascination with disease and biological weapons of mass destruction; that this fascination has led to a "death wish" on the part of modern civilization; that disease outbreaks in the West have historically been blamed on foreign individuals; and that our cultural absorption with bioterrorism has distorted our perceptions of actual cultural threats.

Unfortunately, Sarasin's book largely comprises a rambling essay of opinions, such as why and how the U.S. anthrax mailings (4 letters delivered by the postal service that caused 5 deaths and 18 cases of illness) subsequent to the September 11 attacks occurred. Sarasin bases much of the proof of his assumptions on media reports (print and Internet postings), which lead him to the inference that the anthrax mailings were the work of an American perpetrator trained by the military and were composed of highly purified anthrax spores mixed with special adjuvants for aerosol dispersal—suppositions that are at present either unproven or disputed. A recent publication by a scientist from the Federal Bureau of Investigation describes the anthrax mailings of 5 years ago as containing a crude prepara-

tion of spores that may have been created by an individual or small group without ties to government sponsorship. Interestingly, in a June 2005 media interview that Sarasin references, Ken Alibek made the similar observation that the anthrax used in the U.S. attacks could have been manufactured "somewhere in a forest, in a car, without a microscope," to which Sarasin responds, "[it] just goes to show where even expert discourse can lead: into a quagmire of speculation and phantasms" (p. 257).

There is also considerable vitriol in this book, much of which appears to be directed at the United States; witness such passages as, "Bioterror" is the dream dreamed by postmodern society in the throes of a self-determined state of war, and 'anthrax' its wish fulfillment" (p. 11); "Typhoid Mary" . . . was a sexist and racist construction" (p. 239); "The claim that the American government was totally surprised by the [September 11] attacks does not seem to hold water" (p. 141); "'anthrax' was crucial in extending [President] Bush's long and unconventional 'war on terror'" (p. 7); "The feverish anticipation of a bioterrorist attack started slowly in the years leading up to September 11 and increased sharply from the moment of the World Trade Center attack until it reached the anthrax frenzy" (p. 149).

By using fiction and media accounts rather than scientific documentation to argue his points, and in the absence of much-needed editing throughout his book, Sarasin has produced a rambling diatribe against Western culture and U.S. biodefense policies. This politicized, acrimonious commentary provides a strongly opinionated and biased viewpoint of recent history for anyone seeking such accounts.

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Dr. Zygmunt Francis Dembek (Lieutenant Colonel, Medical Service Corps) is a mobilized Reservist at the U.S. Army Medical Research Institute of Infectious Diseases. He is adjunct Assistant Professor at the Uniformed Services University of the Health Sciences and an Assistant Clinical Professor at the University of Connecticut School of Medicine.

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Learning Large Lessons: The Evolving Roles of Ground Power and Air Power in the Post-Cold War World

by David E. Johnson

Santa Monica, CA: RAND, 2007,

Monograph MG-405-1

264 pp. \$28.00

ISBN: 978-0-8330-3876-0

Reviewed by

BARRY D. WATTS

American Airmen have been disagreeing with American Soldiers and Marines over the relative utility of airpower as opposed to ground power since World War I. This longstanding debate has rarely changed opinions on either side, despite the emphasis on jointness mandated by the 1986 Goldwater-Nichols Department of Defense Reorganization Act. Instead, discussions over the years have largely consisted of the participants talking past one another.

David Johnson's *Learning Large Lessons* sheds some long-needed light on this debate. The book first appeared in 2006. This year, RAND published an updated version both to satisfy demand for the book and to address the new Joint Publication 3-0, *Joint Operations*. Johnson, a retired Army colonel and former artillery commander, has briefed the implications of *Learning Large Lessons* to the Air Force secretary and four-star generals

at Corona, the semiannual senior leader conference, as well as to classes at the Army and Air Force command and staff colleges. Air Force chief General T. Michael Moseley has added the book to his professional reading list. Insofar as evidence and balanced analysis can be brought to bear on the ever-divisive issue of modern airpower versus "boots on the ground," *Learning Large Lessons* is a gem. It deserves to be read—thoughtfully—by Airmen, Sailors, Soldiers, and Marines alike.

Why is *Learning Large Lessons* so important? The simple answer is that even though the debate it addresses goes back to 1917, there has been an astonishing lack of intellectual or doctrinal convergence right down to the present day. Consider, for example, the extent of disagreement that persists between the U.S. Air Force and Army over their relative shares of Iraqi tanks destroyed during Operation *Desert Storm* in 1991. Postwar imagery analysis indicated that airpower, prior to the beginning of the ground offensive on February 24, had eliminated a minimum of 40 percent of all Iraqi tanks destroyed by February 28. Yet retired Army Lieutenant General William Odom opined in a 1997 *Foreign Affairs* article that the Army alone killed 70 to 80 percent of the Iraqi tanks, and in his 1999 book *The Gulf War: A Complete History*, based on long-after-the-fact interviews and recollections, Thomas Houlahan reduced the total share of Iraqi tanks destroyed by fixed-wing aircraft to 13 percent.

Much of the reason Soldiers, Airmen, Marines, and even Sailors have had so much difficulty agreeing on airpower's utility is that all sides have viewed the debate as a zero-sum competition for resources within the

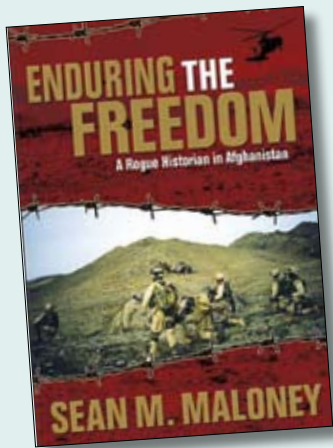
Pentagon's annual budget. In the wake of the 1991 Persian Gulf War, Airmen appeared—at least on the surface—to gain the upper hand. The outcome of the North Atlantic Treaty Organization's 1999 air campaign aimed at compelling Slobodan Milosevic's regime to cease ethnic cleansing in Kosovo seemingly strengthened the hand of airpower advocates because the political aim was ostensibly achieved before any ground forces entered the fight. Operation *Enduring Freedom* in late 2001 had more mixed results. Laser-guided bombs and the all-weather joint direct attack munitions were instrumental in providing the fire support that enabled Northern Alliance forces to overthrow the Taliban in Afghanistan and scatter al Qaeda. But the precise targeting of U.S. fixed-wing airpower was largely done by special forces and Central Intelligence Agency operatives on the ground—in some cases riding on horseback.

Since May 2003, Soldiers and Marines have become even more ascendant. As coalition forces have grown increasingly bogged down in a "long, hard slog" against various foreign jihadists, insurgents, religious militias, and plain criminals inside Iraq, ground-force advocates have pressed the need for more "boots on the ground," and the administration has agreed. In January 2007, Defense Secretary Robert Gates and President George W. Bush endorsed a 92,000-troop increase in Army and Marine end strength over 5 years. Although these additional troops could do much to relieve the grinding pressure of current operations in Iraq and Afghanistan on the Army and Marine Corps, the majority of them are unlikely to be trained or equipped before the 2008 Presidential election, after which U.S. troop levels in Southwest Asia are

likely to be substantially reduced. Thus, there is a serious question as to whether the extra 92,000 troops address the longer-term challenges of, say, dealing with a rising China or merely today's problem of overstretched ground forces.

Given this strategic dilemma, proponents on both sides of the argument over airpower versus ground power would benefit from reading Johnson's *Learning Large Lessons*. His *Fast Tanks and Heavy Bombers* (Cornell University Press, 1998) provided a penetrating examination of the follies of extremism among the Army's infantry branch, cavalry branch, and aviators from 1917 to 1945. *Learning Large Lessons* extends this line of research by examining five recent conflicts as a basis for drawing conclusions about the changing roles of air and ground power. The five conflicts are Operations *Desert Storm* (1991), *Deliberate Force* in Bosnia (1995), *Allied Force* in Kosovo (1999), *Enduring Freedom* in Afghanistan (2001), and *Iraqi Freedom* (2003). Johnson's basic conclusion is that, since 1991, airpower, employing precision munitions, informed by advanced sensors, and linked by targeting networks, has shown "growing levels of effectiveness and robustness and played commensurately growing roles" (p. 137). Nevertheless, Army doctrine in particular is not being revised to "accommodate this new reality," and joint doctrine "still defers to the surface components" (p. 138). The reason is a lack of trust, especially between the Army and Air Force. "The Army," Johnson observes, "does not trust the Air Force to be there when it is needed, and the Air Force does not trust the Army to employ air power properly if it is in control of the resource" (p. 197). Perhaps it is time for Soldiers and Airmen to begin trusting one another.

Barry Watts is a Senior Fellow at the Center for Strategic and Budgetary Assessments, where he has recently published *Six Decades of Guided Munitions and Battle Networks: Progress and Prospects*. He is also the author of *Clausewitzian Friction and Future War* (National Defense University Press, 2004).



Enduring the Freedom: A Rogue Historian in Afghanistan

by Sean M. Maloney

Dulles, VA: Potomac Books, 2005

320 pp. \$27.50

ISBN: 1574889532

Reviewed by
JAMES SNYDER

In late summer 2006, North Atlantic Treaty Organization (NATO) forces in Afghanistan engaged in the first sustained infantry action in the Alliance's history. Surprising observers and some Allies alike, NATO found itself at war far from Europe, against a resurgent Taliban in Kandahar and Helmand provinces.

This was an extraordinary development. NATO's mission in Afghanistan is barely 4 years old, having begun in 2003 and rapidly evolving from policing the capital into conducting a comprehensive security and reconstruction operation involving 32,000 Allied and partner soldiers deployed across the entire country. The International Security Assistance Force (ISAF) mission now ranges from peacekeeping to virtual counterinsurgency in some parts of the country. Along the way, it has evolved into the most complex operation ever undertaken by the Alliance.

Canadian military historian Sean Maloney visited Afghanistan in early 2003, observing ISAF before the NATO takeover and Operation *Enduring Freedom*

(OEF) just as war in Iraq began to eclipse them. Maloney is an accomplished historian who served with the Canadian Army in Europe during the Cold War and now teaches at the Royal Military College in Kingston, Ontario. He has written extensively on NATO missions, particularly in the Balkans, and is a cheerleader for a more robust Canadian role in the world—a controversial opinion, especially now, as Canada takes on more responsibilities, and casualties, in Afghanistan.

ISAF at the time of Maloney's visit was a small operation limited to Kabul, a force constituted by various nations under the authority of the Bonn Accords and the United Nations. Maloney spent time with German and Dutch units in the capital—Bulgarians, Romanians, Macedonians, Spaniards, and Hungarians also make appearances—when they were still dressing in green fatigues to differentiate themselves from the desert uniforms worn by the *talibanjaeger* (Taliban hunter) Americans and their coalition partners. It was a dangerous time, then as now, as Afghanistan began to emerge from 30 years of Soviet occupation, civil war, and Taliban rule.

Maloney begins with a precise summary of the 2001 invasion and follows his freelance trip from Kabul to Bagram and then to Kandahar, recording his experiences along the way. His intent in Afghanistan is to document the deeds of brave men, a laudable aim even after the fall of

the Taliban. But he records very little history here beyond the rich tradition of particular units he encounters, and his descriptions of various subunit activities—psychological operations, the Joint Visitors Bureau, a German field hospital—are cursory at best. Beyond that, Maloney simply does not have the material or skill to make a compelling first-person narrative of his experience. A comparison of coalition operations in Afghanistan to NATO's experience in the Balkans might have been useful and interesting, but he makes no attempt at contrast. He exudes natural bonhomie with members of other uniformed services and drips cheap contempt for almost everybody else he encounters (Geraldo Rivera appears twice, providing an easy target). The text is littered with embarrassing misspellings and typographical errors.

Nonetheless, a useful portion of this book focuses on Maloney's experience with a company from the U.S. 82^d Airborne Division (mostly Bravo Company, 2^d Battalion, 504th Parachute Infantry Regiment) operating with OEF in Zabol province. While nothing particularly remarkable happens—the company efficiently carries out a series of raids in Taliban territory, resulting in huge arms seizures—the mission gives a flavor of the kinds of routinely perilous actions ISAF and coalition forces must carry out there and elsewhere across the country.

The sheer remoteness and hostility of the Afghan terrain

present an enormous challenge to airborne troops sustaining themselves for days on end at high altitude. The troopers begin to place bets on how long the 35-year-old Maloney will last (he manages, but admits he is not packing the 100 pounds most young soldiers carry). Cultural complexity provides another challenge; for example, the company requires a section of female Military Police to handle local women sensitively. Maloney expresses the same bewilderment that the troopers no doubt feel when trying to assess local motives and actions in such an alien culture; he finds himself unnerved by what the soldiers dub “Hadji TV,” when locals come outside simply to watch the company conduct a sweep. Operating in this environment requires the judgment to know whether something is out of place or whether a local “person under control” is telling the truth. Such judgment can only be developed with experience, and even then confusion reigns.

Ironically, these early raids in Taliban country that Maloney records seem to foreshadow the return of those fighters whom ISAF and the coalition forces today confront again. The mission of securing all of Afghanistan now places NATO squarely against the Taliban and other forces of disorder. More examination of the everyday danger in these routine operations should follow, because it is in such routine actions that Afghanistan will be won or lost.

James Snyder is the U.S. Information Officer on the International Staff at NATO Headquarters in Brussels.



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INSS Special Report

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