

This is the first of four columns that I have been invited to contribute to the Bulletin Online during 2007. Those of you who don't know me can visit my long-standing website www.fas.org/RLG/, where you can find my biography and a selection of my papers, mostly policy oriented in the national security field.

Although I never had a full-time job in government, for many years I spent half my time working on technical policy matters, most intensively as a member of the President's Science Advisory Committee (PSAC) and at the same time, chair or member of several of the military panels of PSAC. In particular, I chaired the Military Aircraft Panel, the Naval Warfare Panel, the Antisubmarine Warfare Panel, the Aircraft Panel. I was also a member of several others, including the Vietnam Panel, the Strategic Military Panel, and a special long-standing panel advisory to the President's Science Advisor, the Director of Central Intelligence, and the Secretary of Defense—the "Land Panel" or the Panel on Overhead Reconnaissance.

It was a pleasure and a revelation to work with such individuals of extraordinary intelligence, energy, and commitment to the public good as Hans A. Bethe, Edward M. Purcell, Paul M. Doty, Jerome B. Wiesner, Sidney D. Drell, W. K. H. Panofsky, to name only a few of my closest colleagues. These were members of PSAC, but there were also many others who served on the dozen or so panels, either ad hoc or quasi-permanent, that provided in many cases real meat for the national policy process. The panels also served to introduce experts to the PSAC

structure and to the Executive Office of the President, and a good many of the panelists eventually served on PSAC itself.

Meeting for two days each month (and the panels typically each met for two days each month), PSAC was a serious activity. Although it advised the president, primarily through the PSAC chair who was also the President's Science Advisor, it had major impact simply by the activities of its panels in meeting regularly with representatives of the Defense Department (in the case of my military oriented panels) contractors, and military officers as well. The many in Defense or the military who were doing their best to provide a capable, rational, responsive system, saw the benefits of interaction with the panel and pushed their organizations to provide the best presentation and to benefit from the interaction with the panel members.

All was not sweetness and light, to be sure, and I recall Gen. Glenn A. Kent responding to one of my complaints, "You don't understand, Dick. The purpose of a military briefing is not to convey information but to fill time." Thereafter, we requested hard copies of the briefings the afternoon before the meeting, so that the panelists would each have a copy and could review the material and move the briefing along so that the time was not filled and so there was opportunity for discussion.

In some cases the military countered by sending people who were ignorant and hence incapable of discussion, but in other cases there was great openness and constructive interaction. Paradoxically, this was more often the case with the highly classified satellite reconnaissance intelligence activities, which involved the Land Panel.

My concern now, as I continue to provide my best understanding and advice inside the government and sometimes in open publications, is that the current system of U.S. government is incapable of serving the people. There are some excellent individuals throughout the government and in Congress, but it is Congress that most explicitly exhibits the problems with the governance of the United States at present.

Running a company or a government is hard work, even if everybody is trying to do his or her best. We are unable to counter threats or seize opportunities if people are largely distracted, as is the case in the House of Representatives, where having been elected, a principal concern is to get reelected in two years. Add to that a disdain for government on the part of some, and a feeling of hopelessness on the part of others, that no matter what they do, it will be for nothing, because the system really is broken, and one sees why very little gets done, and what gets "done" is often for show and not for real. But it takes time and staff and keeps Congress from doing the work of the nation.¹

In recent years, enormous bills (hundreds of pages) appear on a member's desk in the morning, for a vote to be taken that day or the next. No one could read the text in that time, much less find the little time bombs that have been inserted as anonymous "earmarks," typically in the dead of night, in a conference between the representatives of House and the Senate committees. Members don't know the true purpose of the earmark, who inserted it in the bill, or its implications.

When I served in 1998 on the congressionally mandated Committee to Assess the Ballistic Missile Threat to the United States (the "Rumsfeld Commission"), our report concentrated, as requested, on the prospect that Iraq, Iran, or North Korea would develop intercontinental ballistic missiles (ICBMs) to threaten the United States with nuclear warheads or with biological weapons (BW). However, our report states frankly:

"Sea launch of shorter range ballistic missiles is another possibility. This could enable a country to pose a direct territorial threat to the U.S. sooner than it could by waiting to develop an ICBM for launch from its own territory. Sea-launching could also permit it to target a larger area of the U.S. than would a missile fired from its home territory. India is working on a sea launch capability. Air launch is another possible mode of delivering a shorter range missile to

U.S. territory."

Nevertheless, Congress accelerated the deployment of a mid-course defense against a small number of ICBMs, using ground-based interceptors, that will not work against feasible countermeasures that would be ready whenever such an ICBM threat materialized in the face of a defense. The very fact of spending \$10 billion a year on mid-course defense drives out more feasible defenses against North Korea such as boost-phase intercept and also tends to minimize the more real threat of nuclear weapons or BW attacks from inside the United States and short-range cruise missile or ballistic missile attacks from ships near U.S. shores against coastal cities.

The enormous waste of the development and deployment program of the 10-warhead MX ICBM missile system to compensate for a stated vulnerability of the 1,000 Minuteman missiles in silos to Soviet nuclear attack, was eventually reduced to a puny deployment of 50 MX missiles in those same Minuteman silos—replacing Minuteman vulnerability with MX vulnerability. This despite an excellent 1981 report on MX missile basing from the Office of Technology Assessment and many papers and speeches by myself, Sidney Drell, and others.

The error is not always toward building an ineffective weapons system. In the other direction, the military lagged by 10 years or more in the deployment of the Global Positioning System that it was clear was a feasible approach to

unprecedented military capability. But when such enormous improvements in effectiveness are achieved, the military budgets and large expenditures for platforms instead of munitions do not properly reflect the new opportunities.

Misuse of technology is not limited to the military. The Energy Department is emphasizing the Global Nuclear Energy Partnership (GNEP) announced by President George W. Bush in February 2006, with the motivation of providing other countries—particularly non-nuclear weapon states party to the Nuclear Non-Proliferation Treaty—with an assured supply of low-enriched uranium fuel for their reactors. The spent fuel, containing about 1 percent plutonium, would be returned to the supplier nation or for disposal by another nuclear weapon state or state that had gained the confidence of the world that it would not extract the plutonium for making nuclear weapons. Such disposal could be directly into a mined geological repository for the packaged spent fuel, or after reprocessing for the removal of the longest-lived heat-producing isotopes—the transuranics of which plutonium is the most plentiful. I support this portion of GNEP.

But Energy proposes to spend by far the most money in GNEP on the immediate deployment and operation of reprocessing of U.S. spent fuel from the 103 light water reactors that provide 20 percent of U.S. electricity. This makes no sense. The U.S. spent fuel is highly proliferation resistant in itself and within the United States. And the extracted plutonium, whether or not mixed with uranium or with transuranics is a far greater proliferation risk than is the spent fuel itself.

As was demonstrated in the initiation of the Iraq War with the assurance that Saddam Hussein possessed weapons of mass destruction that were a threat to the United States, and with the performance of the U.S. government in the matter of Hurricane Katrina, those within government and in Congress are often insulated within a cocoon of like-think.

For this reason, the *Bulletin* and other independent resources and individuals have played—and must play—an enormously influential role in providing facts and analysis on these important matters. But the United States, long priding itself as a young democracy and an example to other peoples and nations, no longer deserves that appellation. It is a very old democracy and a very old country as such things go. And its democracy can hardly be held up as an example to others.

People with technical skills and knowledge have an important role in providing them to the government and to the voters. But all citizens have an urgent obligation to make our system of government work, whether in these matters of costly expenditure or national security, or in the renovation of U.S. infrastructure, the restoration of some approach to fiscal integrity in the U.S. government, or to right the wrongs in Medicare part D, in which the legislation forbids Medicare from negotiating prices with the drug suppliers.

My future columns will focus on technical matters, but I wanted to lay out first that such focus is likely to be entirely ineffective so long as our federal government remains deficient in integrity and competence.

¹ Thomas E. Mann and Norman J. Ornstein, *The Broken Branch: How Congress is Failing America and How to Get It Back on Track* (Oxford University Press, 2006).