

The Sixth Branch: Think Tanks as Auditors

By Hugh Gusterson

Introduction

In the field of nuclear weapons policy there are a number of organizations that perform what I am going to call an audit function in regard to government policy. These organizations are hybrids, operating partly as think tanks and partly as advocacy NGOs. I have in mind in particular the Union of Concerned Scientists (UCS),¹ the Federation of American Scientists (FAS),² and the Natural Resources Defense Council (NRDC).³ UCS, FAS and NRDC are all multi-issue organizations, seeking a voice on a range of issues from the safety of genetically modified food and the dangers of global warming to debt-for-land swaps in the Third World, but it is their work on nuclear weapons policy that interests me here. None of the better known think tanks (the Brookings Institution, the Heritage Foundation, the American Enterprise Institute, or the Cato Institute, for example) employ analysts

¹ See www.ucsusa.org for more information on the Union of Concerned Scientists.

² See www.fas.org for more information on the Federation of American Scientists. A fine history of the early years of FAS is given by Jessica Wang, American Science in an Age of Anxiety: Scientists, Anticommunism and the Cold War (University of North Carolina Press, 1998).

³ See www.nrdc.org for more information of the Natural Resources Defense Council.

who do the kind of nuclear weapons policy work described here – or indeed any kind of nuclear weapons policy analysis.

The Union of Concerned Scientists was founded by MIT physicist and Nobel Laureate Henry Kendall in 1968. It is based in Cambridge, Massachusetts, though it also employs a lobbyist in Washington DC. Its national security team, led by the physicists David Wright and Lisbeth Gronlund, has been particularly active on the issue of missile defense. Wright and Gronlund, together with MIT professor Ted Postol, have persistently critiqued government statements for misrepresenting proposed missile defense systems. In the past they have argued that the government has rigged missile defense tests in space, then exaggerated the technical ability of the system to intercept hostile missiles in a realistic scenario. More recently they have accused the U.S. government of misrepresenting the technical capabilities of proposed missile defense sites in Poland and the Czech Republic in order to dismiss, unfairly, Russian concerns that these sites could target some Russian, as well as future Iranian, ballistic missiles. They have also, together with FAS and NRDC, been pushing for changes in U.S. nuclear weapons policy – from dealing ballistic missiles to cutting the stockpiles. The three organizations produced a joint report making the case for their proposed changes, which was unveiled at a well attended public event in Washington DC.⁴

⁴ http://www.ucsusa.org/global_security/nuclear_weapons/truesecurity.html

The Federation of American Scientists was founded in the 1940s by a group of Manhattan Project veterans concerned that a post-war atomic arms race would lead to catastrophe. They included most notably Philip Morrison, the physicist who did the final assembly of the Nagasaki bomb before going on to professorships in physics at Cornell and MIT.⁵ The FAS today employs a nuclear analyst, Hans Kristensen, who is often quoted in the press on recent developments in nuclear weapons policy. Through its Nuclear Information Project,⁶ FAS offers the public information about the nuclear stockpiles and the nuclear doctrines of the nuclear weapons powers. It also makes available to the public online calculators to figure fallout patterns⁷ and blast effects⁸ in a nuclear attack. Meanwhile the FAS project on Government Secrecy,⁹ directed by Steve Aftergood, publicizes abuses of government secrecy and lobbies for greater openness in government. It also makes available to the public the myriad expert reports written by the Congressional Research Service (CRS) – which CRS itself is not allowed to distribute to the taxpayers who pay for them.

⁵ Some of Morrison's problems under McCarthyism (when the physics faculty at Cornell refused to cooperate with the university administration about any promotion cases in protest against its treatment of Morrison) are described by Sylvan Schweber, In the Shadow of the Bomb: Oppenheimer, Bethe and the Moral Responsibility of the Scientist (Princeton University Press, 2000).

⁶ <http://www.fas.org/programs/ssp/nukes/index.html>

⁷ http://www.fas.org/programs/ssp/nukes/nuclear_weapon_effects/falloutcalc.html?formAction=297&contentId=426

⁸ http://www.fas.org/programs/ssp/nukes/nuclear_weapon_effects/nuclearwpneffctcalc.html?formAction=297&contentId=367

⁹ <http://www.fas.org/programs/ssp/govsec/index.html>

My principal interest in this paper, however, is the Natural Resources Defense Council (NRDC). The veteran team of NRDC nuclear analysts – Tom Cochran, Robert Norris and Chris Paine – has recently been joined by Matt McKinzie. NRDC analysts have long been renowned for their ability to reconstruct secret information about nuclear weapons and nuclear weapons policies from fragmentary evidence available in the public domain, and to use the resulting information to broaden participation in nuclear weapons policy discussions. For example, knowing that a particular category of military officer was responsible for tactical nuclear weapons control, NRDC analysts combed the phone books of all U.S. military bases in Germany in the 1990s to construct a map showing where the U.S. based tactical nuclear weapons in that country – to the great consternation of the U.S. military. In the 1980s the NRDC's series of Nuclear Weapons Databooks¹⁰ were regarded by nuclear weapons scientists, defense intellectuals and antinuclear activists as highly authoritative sources on the numbers and technical characteristics of the nuclear stockpiles of the U.S. and other nuclear powers. Nuclear weapons scientists at the Lawrence Livermore National Laboratory, implicitly conceding the accuracy of the NRDC data, told me they often used NRDC databook information in their unclassified talks and writings, since the NRDC data were in the public domain and Livermore employees were not allowed to use classified data in open talks and publications.

¹⁰ Edited by Thomas Cochran et al, the series of five Nuclear Weapons Databooks were published from 1984-1994. The first four volumes were published by Ballinger, the fifth by Westview.

NRDC and the SIOP

In 2001 the NRDC published “The U.S. Nuclear War Plan: Time for Change”¹¹ – a detailed simulation/reconstruction of the Pentagon’s Single Integrated Operational Plan, the master plan for nuclear war. Making clear the democratic impulse behind this project, the NRDC analysts said:

Because of the extreme secrecy that surrounds the war plan and its extraordinary complexity, the only people who really know what the SIOP is are the war planners themselves. In the past, when this tiny group has said it needs this bomb or that, or so many B-2 bombers, it has been difficult for anyone to question them. Even presidents -- who have final say over the use of nuclear weapons and keep the nuclear "football" containing SIOP launch codes and attack options with them at all times -- have only a superficial understanding of the consequences of an attack, according to a former head of STRATCOM, General George Butler.

And so the surreal business of planning for the apocalypse -- which involves the projected deaths of tens or hundreds of millions of

¹¹ <http://www.nrdc.org/nuclear/warplan/index.asp>

people and the prospect of turning vast areas into radioactive wastelands -- continues to be conducted beyond the reach of public scrutiny, and is resistant to civilian efforts to gain oversight. It's hard not to think of *Dr. Strangelove*'s crazed General Ripper saying, "Today, war is too important to be left to politicians."¹²

In fact a number of members of Congress had been upset for many years that they were not allowed access to the details of the SIOP, although they were expected to appropriate funds for the nuclear weapons that enabled it. Many Congressional leaders complained that they could not participate in any meaningful way in debates about nuclear arms reductions without knowing the details of the SIOP, since they knew neither how many weapons were required for the various attack options war planners have built into the SIOP nor the strategic logic of the various menus within the SIOP. One of the primary purposes of the NRDC study was to produce a briefing on an NRDC simulation of the SIOP that could be offered to members of Congress as a way of inciting more informed debate about nuclear arms reductions and about Congressional appropriations for nuclear weapons. NRDC analysts also wanted to incite debate about the extraordinary level of human casualties the SIOP took as given, hoping to move war planners away from scenarios that were still essentially cold war options in their scale.

¹² <http://www.nrdc.org/nuclear/nwarplan.asp>

In order to generate their simulated SIOP, NRDC researchers compiled information of various kinds: the numbers of weapons and the explosive yields of the weapons in the U.S. nuclear stockpile; the fallout likely to be generated by each kind of weapon in the U.S. stockpile; the location of potential targets, both weapons and infrastructure, in Russia; satellite imagery of these targets, as well as digital maps of Russia; census data showing distribution patterns of the Russian population; meteorological data that would enable analysts to better predict fallout patterns; and declassified information about earlier war plans.

NRDC analysts then developed a computer program that matched weapons in the U.S. stockpile to Russian targets, mimicking what is known of protocols used by U.S. war planners to determine the amount of firepower needed to destroy a particular target with a sufficient level of certainty. Where Russian targets – such as missile silos – have been hardened, this means targeting them with more destructive weapons. It also often means assigning two U.S. nuclear weapons to each target in order to achieve a high level of certainty that the target would be destroyed.

The NRDC SIOP simulates two possible nuclear attacks on Russia. One is a “counterforce” attack, targeted on Russian nuclear weapons rather than population centers and industrial infrastructure. The second is a “countervalue” attack that uses smaller numbers of weapons to destroy Russian cities. It is widely believed that the official U.S. SIOP includes both kinds of option.

Having run its simulations, the NRDC report concluded: “A “precision” attack against Russia’s nuclear forces -- with an arsenal of about 1,300 warheads -- would kill 8 to 12 million people and injure millions more, while destroying most of Russia’s nuclear weapons. In a “countervalue” attack, the U.S. could kill or injure up to 50 million Russians with a mere 3 percent of its current arsenal of more than 7,000 strategic warheads.”¹³

NRDC analysts were told, privately and discreetly, that their simulated SIOP was quite close to the actual SIOP. While their exercise is not known to have had any impact on the actual SIOP, NRDC staffers did brief their study in Congress and elsewhere, producing debate about plans, not much changed since the end of the cold war, to kill millions of Russians in a nuclear war. This exercise was also part of a suite of initiatives by NRDC, FAS, UCS and other organizations to excite pressure for steeper cuts in the nuclear stockpiles of the nuclear weapons states. While no commitment to such steeper cuts has been made as yet, pressure to enact such cuts has been steadily building in the expert community of nuclear weapons analysts and former foreign policy statesmen.¹⁴ The NRDC exercise surely played a part in the building of this pressure.

¹³ <http://www.nrdc.org/nuclear/nwarplan.asp>

¹⁴ See, for example, Hugh Gusterson, “The new Nuclear Abolitionists,” The Bulletin Online, May 13, <http://www.thebulletin.org/web-edition/columnists/hugh-gusterson/the-new-nuclear-abolitionists>

Conclusion: Audit

I have written elsewhere¹⁵ about the vital importance of the audit function in an increasingly complex, technocratic society, and about a gathering crisis in the actual performance of this audit function. By “audit function” I mean phenomena as disparate as the interagency review process that produces a National Intelligence Estimate, regulatory oversight of mortgage markets and pharmaceutical clinical trials, Congressional oversight of government agencies, the scrutiny of bids for government contracts; and media reporting of policy decisions. In recent years there has been a growing sense that the integrity of audit has been eroded by special interests in a neoliberal economy and by an increasingly politicized executive branch. Thus recent years have seen such scandals as a war in Iraq based on inadequately vetted intelligence; a major financial crisis brought on by inadequate auditing of mortgage applications; FDA-approved drugs, such as VIOXX, that kill people; official reports that misrepresent the preponderance of scientific opinion on global climate change, and so on.

The U.S. system as conceived by its progenitors as one based upon a system of checks and balances. The founders conceived of three branches – the executive, legislative and judicial – balancing one another. To that has been added the media – the fourth estate. Sheila Jasanoff has recently declared scientific advisors to

¹⁵ Hugh Gusterson, “The Auditors,” Boston Review, November/December, 2005, <http://www.bostonreview.net/BR30.6/gusterson.html>.

constitute a “fifth branch.”¹⁶ I am proposing here that NGOs and think tanks constitute a “sixth branch” that has a vital role to play as a check and balance in the making of government policy, particularly through its enactment of an audit function.

¹⁶ Sheila Jasanoff, The Fifth Branch: Scientific Advisors as Policymakers, Cambridge, MA: Harvard University Press, 1990