More on DOE's security vulnerabilities

In the wake of revelations about alleged Chinese spying at U.S. nuclear-weapons labs (SN: 6/5/99, p. 367), the Department of Energy (DOE) has had teams of internal and external investigators probing what vulnerabilities remain. Two of those teams recently released their findings in separate reports. Though both found significant security weaknesses, they suggested very different tactics for addressing them.

On June 30, a special investigatory panel convened by the President's Foreign Intelligence Advisory Board, headed by former Sen. Warren B. Rudman (R–N.H.), concluded that DOE's research laboratories embody "science at its best and security of secrets at its worst."

Since DOE's inception in 1978, its approach to security has proven "dysfunctional," the report says. Following interviews with staff and administrators, and after sifting through 700 documents, Rudman's panel concluded that DOE remains "saturated with cynicism, an arrogant disregard for authority, and a staggering pattern of denial [of security vulnerabilities]." Harangues, recurring administrative changes, and threats of espionage haven't changed the situation, the panel reports. It argues that "DOE is incapable of reforming itself"—even under an activist leader, such as current Secretary Bill Richardson.

One solution, the Rudman panel asserts, would be to bundle all weapons programs into a new "semi-autonomous" DOE division with "a clear mission, streamlined bureaucracy, and drastically simplified lines of authority and accountability." Last week, the Senate voted to restructure DOE along these lines. The House is expected to take up the issue soon.

Glenn Podonsky, director of DOE's Office of Independent Oversight and Performance Assurance, believes that enforcing existing security regulations, however, might prove a simpler solution.

Earlier this month, his team briefed Congress on its classified analysis of security at one weapons facility—Lawrence Livermore National Laboratory. These in-house investigators also found a long history of weak security. Unlike Rudman's group, however, Podonsky's saw signs that the labs are "turning things around" and are committed to improving security.

"I don't want to sound like a cheerleader," Podonsky told SCIENCE NEWS, but Livermore's security vulnerabilities "were not what we would call critical—meaning something of dire consequence." In some cases, an individual might have failed to lock a closed safe bearing classified documents. Other times, a scientist might have inadvertently shared information with colleagues who weren't cleared to receive it.

Podonsky likens the situation to the use of seat belts. When these devices were novel, many people forgot to use them or thought them needlessly restrictive. With enforcement of their mandatory use, however, buckling seat belts has become routine for most drivers. Unfortunately, Podonsky says, DOE's lax or erratic enforcement of existing rules never forced security practices to become second nature. That's what's got to change, he says. Under Richardson, that change is happening, he adds. National labs are institutionalizing "a reeducation" campaign to remind people of their security responsibilities, says Podonsky.

His team plans to complete security probes at DOE's other major weapons labs before summer's end. —*J.R.*

Ferreting out fraud: The Nordic track

Since 1992, Denmark, Norway, Finland, and Sweden have all established federal agencies to investigate allegations of scientific misconduct. In all but 9 of their 37 completed investigations, "no dishonesty has been confirmed," according to a report in the July 3 LANCET.

In contrast to U.S. groups, which have created lists of misdeeds that constitute fraud, among the Nordic agencies, "formal definitions have never been considered critical or even feasible," according to Magne Nylenna of the Research Council of Norway in Oslo and his colleagues, who prepared the report. Instead, they find, the general Nordic criterion for dishonesty has been whether any "deviation from good scientific practice is serious or intentional." Gross negligence also qualifies as misconduct in Denmark.

In some cases where investigators found no blatant dishonesty, Nylenna's team notes, there had been some "deviation from good research practice." To deal with this, the Nordic fraud squads have evolved a policy of explicitly describing and publicly reporting such questionable activities.

"Given the great publicity research misconduct has received, there were surprisingly few cases of serious scientific misconduct," observes LANCET Editor Richard Horton in an accompanying editorial. "Yet the pressure for even greater oversight of research is increasing," he says. With researchers worldwide fearing that "excessive regulation and the threat of public witch hunts will deter investigators from doing important research," Horton notes, a researcher "backlash" is developing. —*J.R.*

Congress loses valued science ally

Science lost a respected advocate on July 15 with the death of Rep. George E. Brown Jr. (D–Calif.). The 79-year-old lawmaker succumbed to a postoperative infection following surgery to replace a heart valve.

Long a member of the House Science, Space and Technology Committee, Brown headed it from 1991 until Republicans took over leadership of the House in 1995.

George Brown Jr., 1920–1999

A committee statement notes that Brown focused on conservation, environmental degradation, technology transfer, renewable energy sources, the hazards of burning fossil fuels, destructive effects of Freon, and the importance of keeping space science separate from the military—many years ago, "when there were few listeners and fewer converts." During his 18 terms in Congress, Brown played an active role in establishing the Environmental Protection Agency, the Office of Technology Assessment, and a permanent presidential science advisory body—the Office of Science and Technology Policy.

Last year, in challenging several major facets of a National Science Policy report issued by the Science Committee, Brown laid out some longstanding concerns. He argued that "we need to do a more rational job of identifying specific social needs that science can help us remedy . . . . To put it simply, science for what end? It isn't enough to declare science a public good and walk away from the table. When we use public resources to support science and technology, we should clearly identify the public purposes which we desire."

"I am particularly concerned," he said, "that increasing technological sophistication and maldistribution of educational opportunity could create a two-tier society . . . of technological haves and have-nots."

Recalls National Science Foundation Director Rita R. Colwell, Brown was Congress' "most articulate spokesperson for continuing investments in science and technology." —*J.R.*