Briefing:

Science and Engineering Academies Elect New Officers

Spring has brought several new officers to the National Academies of Science (NAS) and Engineering (NAE). Stephen Bechtel, Jr., will leave the engineers' governing council on 30 June, having served as the first outside chairman of the revamped, independent council established in 1982. Bechtel heads the engineering firm bearing his name (founded by his father), the former employer of George Shultz and Caspar Weinberger. As a fund-raiser, Bechtel was exceptional, helping to raise more than $15 million to support NAE operations. This sum is considered the first installment of a $30-million plan to study U.S. industrial needs over the next decade, known as the "Technological Leadership Program."

Bechtel will be succeeded by John Welch, Jr., the 51-year-old chairman and chief executive officer of General Electric. By academy standards, he is "pleasingly young and fresh," one observer says. Welch is a chemical engineer, credited with original work in industrial plastics. He encouraged the development of computer-aided tomography (the CAT scanner) at GE and pushed the company into medical technologies. He is described as energetic and forceful, having shown some daring recently by his decision to merge GE with RCA. U.S. antitrust authorities had no objection. Welch's experience, combining the electronics and service industries, will fit in well with NAE's agenda, staffers say.

Meanwhile, the NAE council has gained three new members. They are Edward Kane, former president and now director of E. I. du Pont de Nemours & Co., to be NAE's treasurer; Ralph Gomory, director of research at IBM's Thomas J. Watson laboratory; and Herbert Richardson, dean of engineering at Texas A&M University.

The National Academy of Sciences announced some changes recently as well. Its new foreign secretary will be William Gordon, professor emeritus of space physics at Rice University. He succeeds Walter Rosenblith of Massachusetts Institute of Technology (MIT). The NAS council acquired four new members: Francisco Ayala of the University of California at Davis, Harry Gray of the California Institute of Technology, Arthur Kelman of the University of Wisconsin at Madison, and Francis Low of MIT.

In another area, NAS has combined its management of research involving the environment and toxicology under a single new Board on Environmental Studies and Toxicology within the National Research Council. The board will be chaired by Donald Hornig, Alfred North Whitehead Professor of Chemistry at Harvard. ■

ELIOT MARSHALL

Congressmen Urge Support for Supercollider

A group of 91 congressmen has sent a letter to President Reagan urging his support for the proposed superconducting supercollider. Dated 11 April, the letter calls the machine "an investment in the future competitiveness of our country, both by the training of our next generation of high-energy physicists and by the technology transfer of the discoveries to our private sector." However, the letter does not call Reagan's attention to the cost of the project, estimated at $3 billion to $6 billion.

The 91 signatories to the letter were organized by Representatives Vic Fazio (D–CA) and Ron Packard (R–CA) largely out of a concern that R&D money for the supercollider might be cut from the Energy Department's budget for fiscal year 1987. "We need approval for next year, so that the supercollider can qualify for construction funding in FY 1988," says Fazio. "Without funding this year, the project may die." Fazio sits on the House appropriations energy and water development subcommittee, and Packard is the ranking Republican on the science and technology investigations and oversights subcommittee.

Despite the current concern over federal deficits, support for the supercollider is widespread in Congress because the project promises to create some 8000 permanent jobs wherever it is built, to say nothing of an influx of construction money into the region. Indeed, interstate competition for the supercollider is already keen. But for now, says a staffer involved in organizing the group of 91, the members are willing to work together to get the supercollider itself approved. The staffer also says that the initiative for the letter to Reagan came from Capitol Hill, not from the physicists involved in planning the machine.

Meanwhile, the supercollider's Central Design Group, headquartered at the Lawrence Berkeley Laboratory, has submitted its 712-page conceptual design report to the Energy Department, together with several thousand pages of appendices. The department is planning to subject this report to an in-depth review at a meeting in Berkeley on 28 April through 3 May, with special attention being paid to the technical specifications, cost estimates, and schedule.

The results of that review will then form the basis for the department's own deliberations on the supercollider. The project is currently being considered for a new start on construction in FY 1988. If it goes forward then, however, budgetary pressures will likely force a slow rate of construction. Alternatively, energy officials may decide to delay the project a year and ask for a new start in FY 1989. Or, they may decide to ask for more R&D. In any case, they will have to reach some kind of decision during the summer, since their budget proposals for FY 1988 are due to go to the White House in September. ■

M. MITCHELL WALDROP

Congress Urged to Change Patterns of Research Support

Growth in economic productivity in the United States will continue to lag unless trends in federal support for science change. This warning was delivered on 15 April to the House Science and Technology Committee's Science Policy Task Force by witnesses assembled to give advice on the optimum funding level for national research. The hearings were part of a yearlong assessment of research priorities for the next decade.

Harvey Brooks, a professor of technology and public policy at Harvard University, argued that "We must not expect to realize the benefits of our own basic science unless we are agressive in seeking out and using the results." Not only must the nation's applied scientists be quicker to tap breakthroughs in basic knowledge, he says, but they must "become more aware of what is going on elsewhere in the world."

Both Brooks and Martin Baily, a senior fellow at the Brookings Institution, drew attention to declining federal support for civilian applied research. "This is a move in the wrong direction," said Baily. And although applied research in the defense sector has risen dramatically in recent years, Brooks noted that the resulting innovation is less and less applicable to the civilian economy.

Even with additional federal support, though, Brooks and Baily say the United States needs to pay more attention to research in other countries. To keep abreast of world competitors, Baily advocates that information centers be set up in critical scien-