## Coalition of Science and Engineering Societies Protests Clinton's R&D Budget Request and Urges a 7% Solution

Presidents of 23 professional societies representing more than 1 million scientists, mathematicians and engineers joined forces on 4 March to protest President Clinton's latest budget request as continuing the "slow decay" of research funding. In their joint statement, addressed to Clinton and Congress, they call for increases "in the range of 7%" above current levels for all ten major science and technology agencies in the government in fiscal 1998. The statement contends that unless budgets are increased for these agencies, the continuing decline in the government's R&D accounts will "jeopardize the future well-being of our nation" and urges the government to reverse a four-year trend in which "real" Federal spending has not kept pace with the nation's low inflation rates in recent years.

The Clinton Administration's proposed budget, sent to Congress on 6 February, contains an overall 2.2% increase for R&D in fiscal 1998, which begins on 1 October. At a briefing for news media and professional societies that day, Clinton's science adviser, John H. Gibbons, claimed that the increase was generous in a difficult budget year, when the President was intent on balancing the budget. With a distinct whiff of hyperbole common to such occasions, Gibbons observed that "research is one of the clear winners" in the President's budget and that fiscal 1998 would be the fifth year in a row that Clinton has asked Congress for increases in R&D spending.

At the press briefing on 4 March, D. Allan Bromley, president of the American Physical Society and former science adviser to President George Bush, cited a recent report from the National Academy of Sciences showing that between fiscal 1994 and fiscal 1997 only two of ten Federal R&D agencies received increases in appropriations measured in inflation-constant dollars. These were the National Institutes of Health, up 8.1%, and the National Science Foundation, which rose 1.8%. The remaining eight agencies experienced shrinking research allocations, ranging from 4.9% for the Agriculture Department to 23.8% for the Interior Department, where the Bureau of Mines was blown apart by Congress last year.

Should that downward trend continue, said Bromley, now dean of engineering at Yale University, it will threaten not only the nation's international preeminence in scientific research but "our ability to maintain the health and quality of life of our citizens, our ability to compete in an increasingly hostile global marketplace and our ability to assure our national security."

Such concerns motivated the signers of the statement into what Bromley claimed is an "unprecedented" display of unity for professional organizations-among them APS, the American Chemical Society, the American Astronomical Society, the American Institute of Physics and the Institute of Electrical and Electronics Engineers. goals listed by Bromley comprise the first of "two fundamental principles" the joint statement emphasized. The other is that, increasingly, scientific disciplines have become interdependent, so that discoveries in one field can lead to advances in others. Bromley gave the examples of nuclear magnetic resonance, ultrasonic imaging, laser surgery and arthroscopy, which all rely on apparently unrelated discoveries in physics and chemistry.

Although all the coalition speakers acknowledged the new political reality of fiscal restraint in Washington, ACS President Paul S. Anderson noted that "balancing the budget does not mean putting progress on hold. We cannot abdicate world leadership on the road to a balanced budget."

Clearly, the 7% solution for improving R&D support faces uncertain prospects in Congress. Still, it is noteworthy that several members of Congress are taking up arms to battle for increased funding for research. All of the presidents commended Senator Phil Gramm, the Texas Republican who introduced S. 124, the National Research Investment Act of 1997, on the first day of the 105th Congress in January. Gramm's bill would double the government's spending on basic science and medical research over the next decade and would raise the total appropriation for nondefense research from the current \$32.5 billion to \$65 billion in fiscal 2007. In his remarks, Bromley noted that 7% annual increases would also double the research budget over ten years.

"In 1965," Gramm said in a statement issued at the same time as the coalition's conference, "5.7% of the Federal budget was spent on nondefense research and investment. In 1997, that figure has dropped by two-thirds to 1.9%.

The need for strengthening investments in research has also been endorsed by a newly organized bipartisan Senate science and technology caucus. It is chaired by Tennessee Republican Bill Frist, a cardiac surgeon before he was elected, and includes New Mexico Republican Pete Domenici, Connecticut Democrat Joseph I. Lieberman and West Virginia Democrat Jay Rockefeller. At their first meeting in February, Frist declared that the caucus members identified science as "one of our nation's highest priorities" and that science and technology, "by any definition, are the

engine of economic growth."

In the House, Representative George Brown, a California Democrat, who as senior member of the Committee on Science has been a longtime champion of research, praised the scientists and engineers for speaking out and announced his intention to introduce legislation calling for an increase of 5% per year in nondefense R&D. And Representive F. James Sensenbrenner, the Wisconsin Democrat who chairs the science committee, announced his legislative agenda for 1997 includes early passage of a commercial space bill and two-year authorizations for the science agencies under the committee's jurisdiction—NASA, NSF, nondefense R&D at the Department of Energy, environmental research, the National Institute of Standards and Technology and the National Oceanographic and Atmospheric Administration. He invited the scientific community to assist the committee on defining the "value" received from the R&D investments of the agencies his committee oversees.

Unlike last year, when the committee under Robert Walker of Pennsylvania, who has since retired, was a prime example of contentious debate, Sensenbrenner and Brown have agreed to work in a bipartisan manner and pass legislation. In early March, Sensenbrenner and House Speaker Newt Gingrich of Georgia designated Representative Vern Ehlers, a Michigan Republican and former physics professor, to be vice chairman of the science committee and to lead a study of US science policy and to revise Vannevar Bush's historic manifesto, Science—the Endless Frontier, for the 21st century.

The work of Ehler's commission was buttressed on 6 March by a survey of 320 economists chosen randomly by The Wall Street Journal from the faculties of 100 leading universities and 10 major business schools. When they were asked to rank ten government policies that were sure to spur economic growth, 43% placed education and R&D at the top. As the Journal put it: "Nothing else even IRWIN GOODWIN ■ came close."