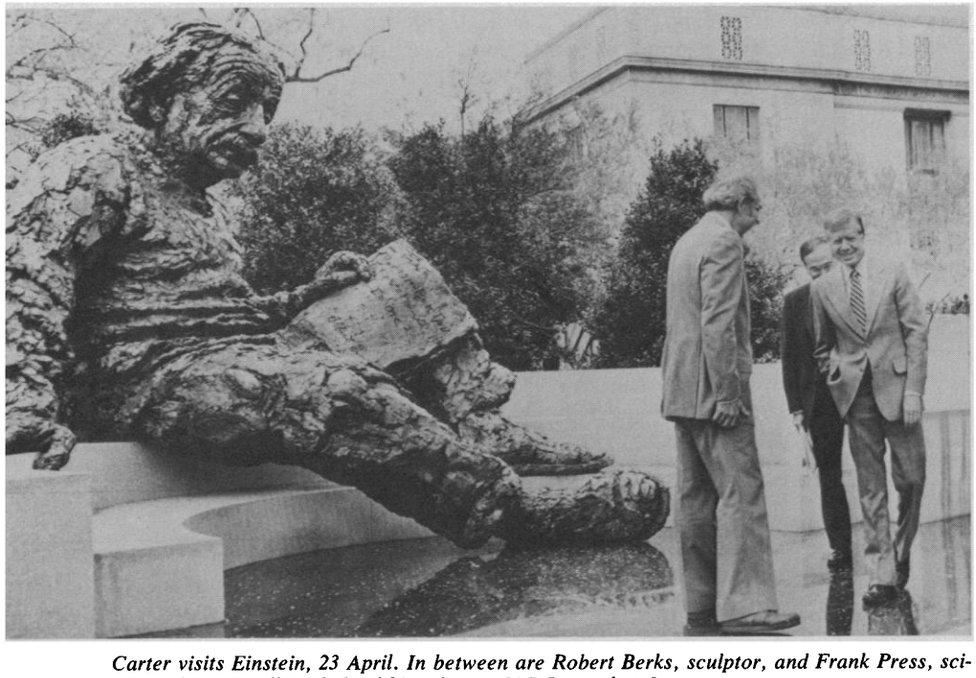
President Carter Addresses National Academy

Pledge of support for basic research is followed by request for political backing on windfall oil tax and SALT II accord

President Jimmy Carter spoke at the annual meeting of the National Academy of Sciences (NAS) last week, the first President to address the Academy since John F. Kennedy did so 16 years ago. Carter's litany of the virtues of science in the life of the nation was crafted to appeal to his venerable audience. He reiterated his commitment to basic research and waxed poetic on the nature of science. "The tree of science is always beautiful, but its fruits can be bitter as well as sweet," the President said. "Our task is to nourish the tree and harvest the fruits that are sweet."



Carter visits Einstein, 23 April. In between are Robert Berks, sculptor, and Frank Press, science advisor, walking behind his advisee. [AP Laserphoto]

Carter's visit to the Academy was arranged through the good offices of presidential science adviser and NAS member Frank Press, who has been very influential in shaping the Administration's science policy. Support of basic research has been a consistent theme in the President's public remarks about science, and Carter took the occasion of the Academy meeting to contrast the attitude of his Administration with sentiments that prevailed in the post-Kennedy era.

Carter said, "American science found itself beleaguered by two very different kinds of anti-intellectualism: on the one hand, by the romantic anti-rationalism of the counterculture and, on the other, by the veiled hostility of a national Administration that distrusted the intellectual and scientific community. The latter represented the more serious threat. Federal policy toward science became infected with a simplistic search for the quick fix. . . . The future of our scientific and technological primacy was put at risk."

"I came to office determined to reverse that dangerous, short-sighted trend, and today I reaffirm to you my commitment to basic research—the bedrock of our scientific and technological future."

The President touched on a subject dear to the hearts of Academy members when he said, "I am concerned about adequate opportunities for creative young scientists to add to the store of knowledge in their fields," but he did not elaborate.

Turning to what he called "our Nation's practical need for science and technology," the President spoke to the Academy about energy and gave a sketch of his own view of what science will bring in the future. Acknowledging that we must rely on existing technology for the next decade or so, Carter sees the 1990's as a time when "the mix of our energy resources will change as we turn increasingly toward unconventional sources of fuel—synthetic oil and gas from coal, shale oil and others. More efficient nuclear reactors can stretch our uranium supplies . . . we will begin to use the sun for a much wider variety of energy purposes. By the second quarter of the 21st century, we will have learned to rely on clean, essentially inexhaustible sources of energy," the President continued optimistically. "The principal candidates include fusion and such solar technologies as photovoltaics," Carter informed his audience of scientists who listened attentively and quietly.

This then brought Carter to a political issue very much on his mind—the controversial windfall oil tax he wants to impose on "unearned, excess profits that would otherwise to to the oil companies because of the decontrol of oil prices." The Administration wants the tax to support an Energy Security Fund to provide relief to poor people unable to afford more expensive energy and to finance energy-related projects such as coal and oil shale development and incentives for solar research.

Using language aimed to get the headlines it did in the next day's papers, Carter said that those who oppose the Energy Security Fund are out to "hoodwink" the American public and provide a "kickback" to the oil companies. "I ask your support in the battle to pass an honest windfall profits tax to finance a real Energy Security Fund for our Nation."

The question of industrial innovation was also on the President's agenda. "Too many of our industries have gone stale," he said. "Innovative industries in countries such as Japan and West Germany put too many of ours to shame," he added, though he gave no examples. "We must nurture an environment in which the new and the fresh approach are put to use," he continued. No one would quarrel with that. More than a year ago, the Administration initiated a major review of issues regarding indus-

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trial innovation. Carter assured the Academy members that "I look forward to reviewing the recommendations [of the study which should be completed soon] and to acting on them." He also pointedly asked those members of the Academy who "are leaders in American business and industry" to emphasize innovation in their own companies.

As one would expect of a speech of this kind, the President was wide-ranging in what he had to say. He touched on the matter of international scientific cooperation, asking the Academy to support his proposal—passed by the House and now before the Senate—for the creation of a new Institute for Scientific and Technological Cooperation (*Science*, 27 April). He predicted that, "In the coming era, we will reap a good return on the more than $100 billion the United States has invested in space."

Carter closed with a discussion of nuclear issues and a plea to the scientific community to rally round the SALT II agreements, which were rumored to be on the verge of being signed as this article went to press. So far, response to the ongoing SALT II debate has been lukewarm. The President tried to arouse opinion. "We have lived too long with nuclear weapons," he said. "We have grown too accustomed to their shadowy presence in our lives. We are too apt to forget what the ultimate horror would be: the instant death of millions and the agonizing death of millions more. . . . In an all-out nuclear exchange, the victim would be nothing less than the past, the present and the future of the species." Hitting what to many scientists is a crucial element of the SALT II issue, Carter declared that "science has given us the extraordinary means of verifying compliance with treaties governing those weapons." Not all of his listeners agreed and many are known to be unhappy with the Administration for refusing to spell out the terms of verification. But the President passed over such realities, saying that "In the great SALT II debate which has already begun, the participation of scientists will be crucial."

The estimated 500 NAS members who heard the address applauded politely as Carter left the hall for a quick visit to the monument to Albert Einstein that had been unveiled on the Academy's grounds the day before. There seemed to be a general consensus that the fact of the President's coming as a gesture of support was as important as what he had to say.—BARBARA J. CULLITON

Debate on the Future of Weapons Labs Widens

DOE carrying out its own review of UC management, critics fault study group makeup, procedures

For some years the University of California (UC) has undergone criticism and sporadic bouts of self-criticism over its role in managing the Livermore and Los Alamos nuclear weapons laboratories.* Now the Department of Energy (DOE), which owns the labs, is conducting its own review of the arrangements.

Critics of the DOE exercise charge that the study group looking at the link between UC and the labs is biased and challenge the legality of closed sessions held by the panel.

The latest round of debate on this issue began on 29 December, when DOE Secretary James R. Schlesinger announced that the department's Energy Research Advisory Board (ERAB) would examine the UC relationship with the laboratories "in the light of changing conditions to assure that the laboratories will continue effectively to carry out the missions assigned to them."

At the same time, Schlesinger said ERAB would be assisted by a special weapons labs study group headed by Solomon Buchsbaum, vice president of Bell Laboratories, who also chairs ERAB.

A report of the findings and conclusions of the study group will be discussed by ERAB at a meeting on 3 and 4 May in Washington. ERAB's own recommendations on the matter will then go to Schlesinger. The ERAB meeting is open to the public and the agenda includes time for comment from the public.

The DOE hierarchy has not expanded publicly on the agency's reasons for undertaking the review of the relationship beyond the allusion to "changing conditions" by Schlesinger. Middle level DOE officials suggest that the tie with UC has not been closely examined since it was established during World War II and, since a lot of attention is being given to the question of the appropriateness of the link on the university side, it makes sense for the agency to determine how well its own interests are being served.

Since DOE began its evaluation moves made by the UC administration toward modifying the university's management arrangements with the laboratories have been put in abeyance. The university administration had been seeking to implement the recommendations of a committee appointed by UC president David S. Saxon (*Science*, 31 March 1978) to study the relationship between the university and the labs. The committee recommended that the university continue to manage the labs, but only on condition that the university exercise stronger policy guidance on both weapons research and energy research at the two laboratories. Proposals by UC vice president William Fretter on practical means to alter the managerial relationship (*Science*, 22 December 1978) were overtaken by the Schlesinger initiative.

Saxon himself is on record as favoring continuation of UC management. In a statement to the study group on 2 February he repeated his view that UC management of the labs "serves the best interests of the nation." The UC regents, the ultimate university authority in the matter, have so far taken no formal position on the issue.

Sentiment in favor of maintaining the UC connection appears to be strong within the laboratories' staff. For example, at a meeting held by the study group at Livermore on 1 March to hear comment by lab staff members and the local public, the university tie was, with few exceptions, given firm backing over other possible management arrangements.

On the other hand, sentiment for severance was expressed in equally strong terms at a similar meeting held by the study group the next day in Berkeley.

*Livermore is located about 35 miles west of Berkeley and Los Alamos is in north central New Mexico.

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