

# R & D overhaul

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## *Mary Gilbertson's exclusive account of the new hard line on funding*

*Fusion magazine correspondent Mary Gilbertson attended the latest conference of the American Association for the Advancement of Science in Washington, D.C. on June 19-20. This installment of a report she wrote especially for EIR describes the June 19 morning and luncheon sessions of the conference.*

The conference was jointly organized by the AAAS and the Brookings Institution. The other 300 in attendance, representing industry, universities, and other research centers were even more surprised than I was to find that the event was devoted to laying out a policy of reorganizing the entire manner in which U.S. research and development is funded and organized. The idea was that inflation and budget constraints necessitate cuts in total R&D and a shift from long-term to short-term R&D, along with tight government control of university and industry research through the Office of Management and Budget and the National Science Foundation (NSF) as the most "out front" managers. The Federal Emergency Management Agency is to play a strong background role, later discussions confirmed.

The "Conference Overview" was delivered by Willis Shapley, consultant to the AAAS for the R&D Budget Analysis. Shapley flatly said: "We used to believe that long-range planning in R&D was important, but that perspective has been derailed by the budget. We have to learn to operate now under new conditions that have been determined by the budget. The question facing you is how the scientific community can help to implement this new perspective. . . . After federal R&D, there's industry R&D. We've gone from an inflationary environment for R&D to a recessionary environment, that's it, that's reality. Now the question is how industry will cope. Then we've got to start thinking of new ways to control the R&D work of state and local governments. . ."

Frank Press, director of the President's Office of Science and Technology Policy, opened the speeches on federal R&D by insisting that even though the budget

cuts were "traumatic," "we still have a strong commitment to R&D. Even with reductions, the budget is the highest since 1972. There will be a 9.6 percent growth in basic R&D, except for NASA. The NSF will be stressing computer science. . . . The NSF and National Institute of Health used to give long-term grants. Now they will give multi-year grants—this will take over long-term funding. We will stress defense, energy and agriculture.

"For instance, under [Defense Secretary] Harold Brown, a director of basic R&D within the DOD was recently established. We haven't had that since 1973. This will ensure a strong Defense-university relationship. The EPA will stress regulation, but with a scientific basis. We'll have special centers, we'll set up cooperative auto programs with industry. We'll work on open market drilling programs with the universities. . . .

"Now, we've got to completely change the way federal, state and local governments operate with each other. [Presidential assistant] Jack Watson and [OMB chief] McIntyre have established a plan for the R&D program impacting state and local governments. . . this will be done through the federal government under a special edict Watson and I recently signed.

"As for our energy R&D policy, we've made headway in conservation and in coal-for-oil substitution. The Energy Mobilization Board will get us synthetic fuels. We put out \$750 million for solar in the fiscal '79 budget. Our high-technological society should take the lead in biomass work.

"As for international affairs, China is the key. We've opened up vast potential for joint research around industry and science, and this is already moving ahead. . . ." (Representatives of the People's Republic of China attended conference events.)

At that point I looked around to get the audience's reaction. They seemed completely cowed. I went to the microphone: "Mr. Press, I'm from *Fusion* magazine. We think we've got to have a nuclear-based economy. But I have only one question to ask you: how the hell are we supposed to run this nation on the kooky stuff you just laid out?"

Somewhat to my surprise, the audience burst out into laughter and clapping. Frank Press came running back to the microphone: "No, no, you don't understand. Listen—we're going to have lots of nuclear power and breeders and—" Then he stopped, looking as if he had said exactly what he shouldn't have, and abruptly sat down.

There was a stir in the audience, and a man rose to ask, "What about Russia getting way ahead of us in military R&D?" Press got up, still looking stunned, and said, "The largest increase in our federal budget is in defense." After more questions on the year-by-year authorization for R&D, someone inquired about "the Watson memo." "Yes, it was signed a month ago," Press

replied. "We've had millions authorized for state and local governments under this—we're going to monitor it." (Later, OMB told me the memo is unavailable to the public.)

The next speaker was Congressman Robert Giaimo of Connecticut, chairman of the House Budget Committee. After stating that R&D must be a national priority, he expounded: "The problem the government has is to control things, because people don't want their taxes raised. The new phenomenon you'll have to get used to is 'if they get, you lose.' But I think it's healthy to compete. . . . We've got to cut unemployment compensation. If a worker has compensation, he won't look for another job.

"We've got a whole new concept of a spending-saving bill on the Hill now [approved June 30 by the Senate, 89-0—ed.]. After every committee comes up with their plan for savings in veterans benefits, school lunches, etc., the \$6.5 billion bill will be voted on as a package, as a savings bill. R&D competes with school lunch. No long-term payoff activity makes sense now. Massive amounts of capital investments are needed to solve the energy crisis—that's another problem of competition. . . ."

In reply to a question about the military budget, Giaimo said the increases have to come from social programs.

"If you guys want money for R&D, you'll have to consider the aged budget . . . it's chewing up to half the federal budget."

gressman. We have no steel industry, we are not graduating scientists and engineers, and our youth are on drugs. But you haven't mentioned any of this. Who, Congressman, wants us to get into a war and lose it?"

There was the sharpest silence yet in the room.

Giaimo went to the microphone, with his tough "competitive" demeanor left behind. Faltering, he said: "I don't think we're going to a war footing. I can't answer any more questions."

After this question period, the moderator announced that there would be a new format, prohibiting questions until all pre-luncheon speakers were finished. This chiefly made the audience more doubtful about some speakers' credibility.

From the Office of Management and Budget, the next speaker was W. Bowman Cutter, associate executive director. He explained that the OMB is meeting with Frank Press's office, "program by program," to determine "federal investment" in R&D. The question of protecting basic research, he said, is "ambiguous. It's so uncertain as to the nature of its return. The economy is so volatile. There's no control over it. The only way to control it is to make fiscal policies tighter. . . . In the short run R&D won't get supported, but in the long run it will . . . we've got to be careful so the government doesn't take over private affairs. . . ."

Joseph Pechman, director of economic studies for the Brookings Institution, began by stating that, "I'm going to stress fiscal policies we have to operate under. A balanced budget won't cut inflation but it will create savings. As demand declines, interest rates will decline. We don't need to alter the tax structure. A tax change to stimulate investment might be good but it wouldn't result in an increase in productivity, or the growth rates. . . . I wish I had something to say about R&D [here Pechman was startled by moans and titters from the audience]. There are tax breaks, and that's enough. . . . We need lower and stricter rules on wages; we don't want to overstimulate the economy."

After several other questions, someone asked: "I'm one of that vanishing species of engineers the *Fusion* representative referred to. Mr. Pechman, investment in R&D has created more jobs; why not do this?" Pechman answered: "Well, we've got expanded health care, education for everybody, we have to look at where we get the best returns, from R&D or social services? We've put a lot into redistributing income. I don't see a distinction between creating wealth and redistributing wealth."

At this point, the moderator interrupted to announce "Lunchtime." The luncheon address was given by the Honorable John C. Sawhill, Deputy Secretary of the DOE and a member of the AAAS board of directors. Sawhill began by repeating a call for "budgetary discipline," then listed the R&D areas "we should stress": "oil shale in situ, MHD systems, photovoltaics, catalytic breakdown for coal gasification."

he said. "We're beginning field testing. We have a federally supported investment bank for synfuels. Our goal is 2 million barrels of oil a day by 1990. . . . This synfuels program must be carried out with the support of the banks and the scientists. We don't have the technology for this program yet. . . . The science and technology community has to provide what's needed. . . . Inefficiency and waste won't be tolerated. The synfuels program will be mobilized like the space program."

There was silence in the huge banquet room. The moderator asked, "Are there any questions?" People turned to look at me. When I stood up, Sawhill said, "I was hoping you wouldn't be here."

all morning long we've been told there's no money for R&D, you'll have to fight the old and the poor to get it. Then lo and behold, you come to lunch and tell us there's money everywhere, new investment banks are set up especially for R&D in synfuels, just come and get it. How dumb do you think the people in this room are? Why didn't you mobilize this magic money for the development of nuclear power? In whose interests are you pushing this ridiculous, totally uneconomic boondoggle?"

Sawhill sat down, as the audience laughed and clapped. End of lunch.