

John Dingell Takes on Stanford

Some fear the upcoming congressional hearings will miss the real issue in indirect costs—the government's failure to renew the infrastructure of science

TEN MONTHS AGO, PAUL BIDDLE, THE BRASH accountant at the Office of Naval Research responsible for negotiating Stanford University's overhead rate on government grants, wrote a memo that was destined to shake up U.S. university research. In the memo, which was sent to his superiors but later became public, Biddle charged that Stanford had developed a cozy relationship with Naval Research that allowed the university to recoup more overhead than it was entitled to.

Some at Stanford have called Biddle a bitter man with an ax to grind. But Representative John Dingell (D-MI), chairman of the Subcommittee on Oversight and Investigations of the House Committee on Energy and Commerce, was among those who took Biddle seriously. Dingell sent his investigators, along with a team from the General Accounting Office, to Stanford last summer to look into Biddle's charges—a probe that

continues 5 months later. And he scheduled hearings on the overhead issue for late February or early March.

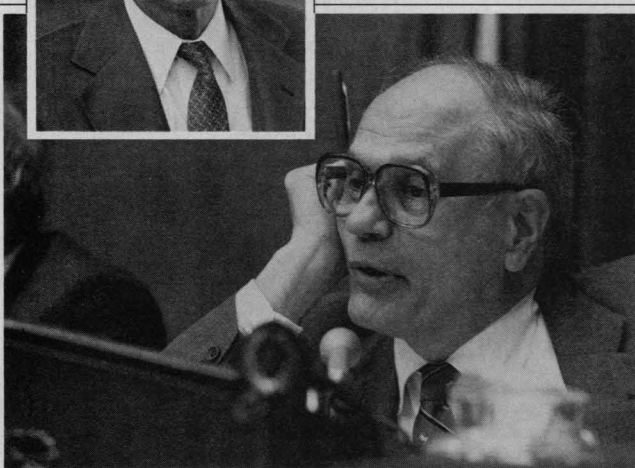
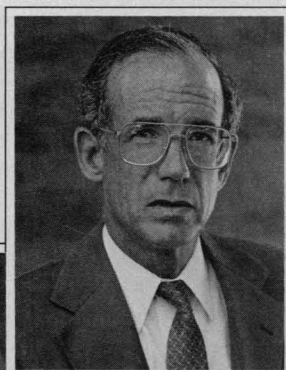
As those hearings approach, leaks from the investigators have created a steady stream of scandalous newspaper fare: Football bashes for the faculty and a university trustees' reception following the wedding of university president Donald Kennedy were charged in part to research, along with a \$1.2-million yacht and expensive flower arrangements for the president's house. The bad press was enough to induce Stanford to return \$500,000 of charges for the president's house and related expenses to the government, even though it stands by its original judgment that the charges for all but the yacht were legal. But that gesture isn't going to shelter Stanford—or any of the other major U.S. research universities—from the storm ahead.

Behind the sensational findings of the Stanford investigation, however, lurks a deeper issue, one that is crucial for all private research universities. Building new, state-of-the-art research facilities and updating those built decades ago is a process so costly that it inevitably drives up overhead rates. As rates

rise, faculty members are increasingly upset by the bite taken out of their precious grants. Universities are caught

Quarry and hound. Stanford president Donald Kennedy (left); Representative John Dingell.

Chuck Painter



in a squeeze: they must increase overhead to cover costs, but if they raise it too much, they may face a faculty revolt—as Stanford did last year (see *Science*, 20 April 1990, p. 292)—or a federal investigation.

The only way out of the bind, university administrators say, is for the government to restore its commitment to rebuilding the infrastructure of science—by paying to update the labs researchers need. Historically, Congress and the Administration have strongly supported that infrastructure. Since World War II, universities have conducted a significant chunk of government-funded research, and the government has pledged to reimburse the universities for the total cost of doing that research. But as budgets got tighter, the government-university research partnership began to crumble.

The first evidence of the dissolution ap-

peared 20 years ago with the discontinuation of several competitive grant programs at the National Science Foundation and the National Institutes of Health for funding new research facilities. Without direct support for facilities, universities started borrowing or raising money for buildings and charging the depreciation of the buildings as overhead. For state universities, rates rose less dramatically because they could turn to their state governments to support building programs. But at private universities the entire burden fell on indirect costs. In the last decade, Stanford, for example, had a rise of 13.4 points in its indirect cost rate. "Of that increase," says Stanford's Kennedy, "12.8 points were in space-related costs."

These underlying realities have been obscured by, among other factors, the arcane system for reimbursement—an accounting maze so complex that no outsider can easily

Indirect Costs:

While the lay press has vented outrage over Stanford's indirect costs, readers have been left wondering how Stanford's accounting style compares with that of other universities. *Science* made an effort to learn how Stanford's peers handle some issues that are likely to come up at the Dingell hearings. Our conclusion: Stanford isn't alone in its basic accounting habits, although specifics are hard to come by since no other university has yet come under the kind of scrutiny that Stanford has been subjected to.

For example, Stanford is not the only university to take advantage of Office of Management and Budget (OMB) guidelines that consider the president's official residence part of "general administration" in support of research. Of seven private universities we surveyed, four—MIT, Harvard, Cornell, and Columbia—charge \$100,000 to \$300,000 in annual expenses for their presidents' houses to a general administrative cost pool. A fraction of this pool (14% at Harvard, 68% at MIT, and 20% at Stanford) is then charged to research overhead, of which the government pays the lion's share.

Administrators at Stanford and other institutions that charge part of the cost of main-

check it. That shroud of mystery has fed the suspicions of faculty, government officials, and other observers that universities may succumb to the temptation to bend or stretch the rules—even to cheat a bit. “The system is designed to encourage you to try to get away with murder,” said one official of a university organization who asked not to be named. “It’s like doing your income tax. You push it as far as you can.” And that, in his view, is just what Stanford did: “Stanford’s accountants...got sloppy and arrogant. They may not have broken the rules, but they pushed the limits.”

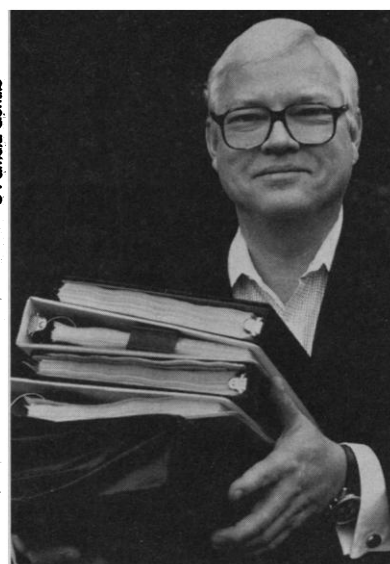
Dingell’s hearings could provide a great service to the scientific community—by offering a forum for an examination of all the complex issues surrounding indirect costs. But anxious administrators are convinced the hearings will instead be a sensationalized attempt to pillory private research universities. According to Milton Goldberg, executive director of the Council on Governmental Relations (a university organization), the Dingell hearings are likely to be devoted to “bashing Stanford, and I don’t think that’s appropriate.”

By leaking sensational snippets—such as flowers for the president’s house—to the press, without appropriate context, the Dingell staff has “expose[d] to ridicule a small fringe element of the whole process,”

says James Culliton, vice president for financial operations at the Massachusetts Institute of Technology.

Representative Dingell declined to be interviewed, but the subcommittee staff insist their mission is appropriate and reasonable. “Our goal is not to go out and topple a major, prestigious institution; our goal is to protect the taxpayers’ dollars,” said one staff member, who spoke on the condition that she not be named. Their mission, they add, will not end with Stanford, but will go on to examine other private and public universities—of which MIT and Harvard are the only potential targets named so far.

As these investigations proceed, say Dingell staffers, any inappropriate charges, no matter how small, deserve to be exposed. And they promise that bigger improprieties will come out at the Stanford hearings, noting that government auditors have recently scrutinized the university’s books for 1983-86 and come up with \$21 million in question-



Are these books cooked? Navy negotiator Paul Biddle.

able charges, out of roughly \$200 million in overhead Stanford collected during those 4 years.

The purpose of the hearings, say staffers, is to force universities and the government oversight agencies to conduct intensive audits to purge unsupportable charges. Indeed, at the upcoming hearings, the Office of Naval Research, which is responsible for negotiating Stanford’s indirect cost rate, will be sharing the hot seat with Stanford,

since Biddle has accused his ONR predecessor of knowingly signing agreements that lent the cover of legitimacy to inflated charges. (The ONR just concluded its own investigation, in which it absolved its negotiators of wrongdoing. See box, p. 736.) The hearings may also result in a call for changes in the Office of Management and Budget’s indirect cost guidelines in order to close loopholes that currently allow charges Dingell’s investigators find inappropriate.

University officials at Stanford and else-

How Does Stanford Compare With Its Peers?

taining the president’s house point out that those costs are dwarfed by the tens of millions it costs to run a university’s general administration. Indeed, this line of thinking has led administrators at other universities, such as Yale and Johns Hopkins, to take the view that expenses for their presidents’ houses are too small to even bother recovering.

One of the most highly criticized practices at Stanford has been the university’s special agreement with the Office of Naval Research (ONR) that allows it to charge 25% of its \$38 million in annual library

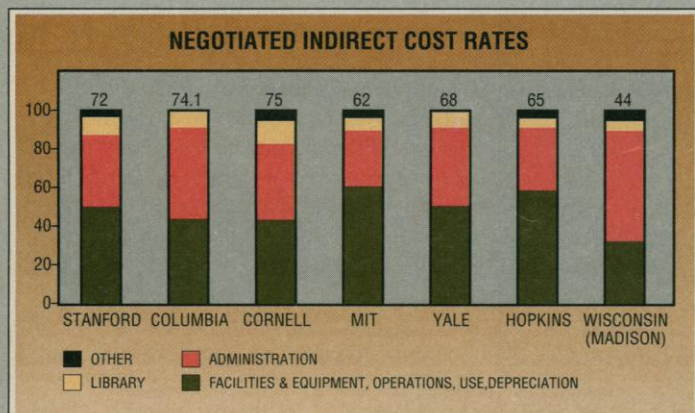
expenses to research overhead. The controversy over whether Stanford’s library agreement is up to snuff has given such agreements a shady connotation, but they are considered kosher under circular A-21, the document that includes the OMB guidelines for overhead reimbursement.

The agreements are negotiated between the university and its overseeing agency (ONR or the Department of Health and Human Services). Most universities polled by *Science* make use of these special arrangements, which enable them to recover millions

of dollars unrecoverable under A-21 formulas.

The agreements may cover not only library costs but also other big-ticket items such as equipment and building depreciation. Stanford is hardly the only university with a special agreement regarding its library. MIT, for example, was able to justify charging 49% of its \$11 million in annual library costs to research, and Cornell got an agreement allowing it to charge 25% of the \$18 million it spends annually on its libraries. Harvard and Columbia, on the other hand, have not sought special agreements, and recover much less.

In this sense Harvard and Columbia are typical of many of the universities *Science* surveyed: While they have some special arrangements to recover costs that A-21 formulas would have missed, they have chosen to forego other opportunities in an effort to keep indirect cost rates from sky-rocketing—and alarming their faculty. This is where Stanford stands apart from its peers: It takes a harder line, defending its right to recover every justifiable cost of research. Even if Dingell finds rich hunting outside Stanford, the cases of the other schools may be tempered by the fact that, although their administrators defend the principle of full cost recovery, in practice they have been less aggressive in going after costs. ■ M.B.



Variety is the spice.

Indirect cost rates (indicated at top of bar) vary, as do the proportions of the total rate made up by administrative and facilities costs (indicated by scale at left).

where say the subcommittee is missing the point: "What I would advise above all else is to try to avoid the accounting arcana and focus on the policy issues," says Robert Rosenzweig, president of the Association of American Universities (AAU). "Administrative costs have not been responsible for increases in indirect cost rates in recent years. What has is facilities costs."

But although faculty understand that the universities are squeezed by the need to replace research buildings, researchers also think administrators should start looking for ways to keep indirect costs down. Thomas Edgington, president of the Federation of American Societies for Experimental Biology, says: "Just as the researchers have to pare down their laboratories and be clever and more selective in the experiments they do, they feel that the institutions cannot go by these automatic, accounting-type, knee-jerk responses [that force] indirect costs up."

And some are doing so. Even before Dingell came on the scene, universities found themselves forced to cut back on building

and renovation. Responding to faculty unrest, Columbia University 5 years ago capped its rate at 74.1%. As a result, that school has had to defer maintenance and renovations on many buildings, says Carl Sparano, Columbia's director of research administration. And after last winter's faculty revolt, Stanford slowed its building schedule.

Action on the government side has added to the pressure by prohibiting full indirect cost recovery on some grants. Two years ago the House Appropriations Subcommittee on Agriculture, chaired by Representative Jamie Whitten (D-MS), capped the indirect cost rate on U.S. Department of Agriculture competitive grants at 25%; last year the cap was lowered further to 14%. "For most of us it will be impossible to accept money under that provision," says Purdue University president Steven Beering. "One would have to fund the difference of the total cost of research from other sources."

The National Science Foundation has also capped the indirect cost rate on some awards. NSF's Presidential Young Investigator (PYI)

awards have an indirect cost limit of 10%. "We are proud of our PYIs, and we have a number of them," says Stanford's dean of research, Robert Byer. "But we have to pay about \$2 million this year, out of our operating budget, to support [the indirect costs of their research]. That is pure and simple forced cost-sharing."

According to Eugene Sunshine, senior vice president for administration at Johns Hopkins University, as the squeeze tightens, the ultimate loser may be science. Tuition can't rise much higher, payouts from endowments are already at the maximum that most private universities will tolerate, and state university budgets are shrinking. "What is the revenue source going to be?" asks Sunshine. "There's going to be a very severe national problem in advancing science." Cornell vice president for research Norman Scott agrees: Further curtailment of indirect cost recovery, he says, "could put private universities out of [the research] business."

Dingell's staff argue that they are not charged with thinking about how U.S. science is supported: the issue for them is whether tax money is being spent responsibly. While they comb Stanford's books for the answer, university advocates point to a simple solution: Do away with all administrative expense reporting and establish a maximum administrative indirect cost rate that could be collected without documentation.

That suggestion was offered 2 years ago in a report by a special AAU committee headed by Cornelius Pings of the University of Southern California. The Pings report pointed out that administrative costs are relatively consistent among most public and private institutions, and have not been the source of the rise in indirect cost rates. It recommended an administrative rate threshold, properly set so that universities would be fairly compensated—and simultaneously encouraged to keep administrative costs down.

"The proposals in the Pings report speak to the very problem that the Stanford situation has uncovered: the ambiguity of certain kinds of charges, and the judgmental factors involved in determining what is a legitimate cost of research and what isn't," says AAU's Rosenzweig. Goldberg, of the Council on Governmental Relations, agrees: "If these recommendations could be implemented, that would simplify and clarify the most contentious part of the system. The debate that will follow will be a debate of policy, rather than a debate over whether the institution is honest or not."

But Kennedy warns that the solutions offered in the Pings report are only a way of focusing attention on the main problem: who is going to pay for research facilities. He and others look to the government. They

Has ONR "Cleared" Stanford?

One of the many wheels that rebel Navy accountant Paul Biddle set in motion when he questioned expenses submitted by Stanford to the government was an investigation by the inspector general of the Office of Naval Research (ONR). In particular, the inspector general looked into Biddle's claims that ONR accountants were soft on Stanford, allowing the university to overcharge the government for research overhead. Last week results of that 5-month investigation were made public—and each side seemed to hear just what it wanted to hear.

"We are very pleased that...the inspector general...has found these accusations to be baseless," crowed Stanford president Donald Kennedy. Representative John Dingell saw it differently, declaring that "the Navy's report finds that there is support for the allegations that Stanford overcharged the government." Biddle himself said Stanford was "not off the hook by any means." Of the positive spin Kennedy put on the report, Biddle said: "Stanford is whistling past the graveyard now. They're scared and they'll go for whatever they can to show vindication of their position."

Which of these conflicting versions is true? ONR dismissed Biddle's specific allegations of coziness and overcharging on the order of \$200 million over the last decade. But the report does not exonerate Stanford. Instead, it concludes that there "appears to be some validity to [Biddle's] concern that the government has overpaid Stanford for indirect costs," although it says investigators couldn't estimate the exact amount.

Dingell won't leave it at that. He points out that ONR's inability to come up with a number is due partly to the fact that the investigators did not look into Stanford's account books, concentrating instead on more qualitative aspects of ONR's dealings with Stanford. The ONR report acknowledges this and calls for a thorough government audit of Stanford's accounts over the past decade.

The effects of the ONR report will be felt not only at Stanford, but also at universities such as Columbia, MIT, and Cornell that negotiate their indirect cost rate with ONR. For example, the report calls for a tightening of the Navy's negotiating policy and a review of special cost allocation agreements at all the universities with which it does business.

Signs of the Navy's new stance were in evidence last week at Stanford, where a special team for indirect cost negotiation shaved two more points from the university's overhead rate, bringing it to 70%. Biddle, who is a member of the team, says Stanford was also put on notice that it has until April to come up with a plan for a better study to support its disputed library charges or risk losing up to four more points. ■ M.B.

have support on Capitol Hill from Senator Terry Sanford (D-NC). Last spring Sanford formed a committee of senators, congressional representatives, and university presidents called the Higher Education Colloquium on Science Facilities to lobby the Bush Administration for a comprehensive plan for improved support of research facilities.

Key to such a plan, says colloquium director Patricia Warren, is that the government get back in the business of direct funding of research facilities, not with earmarked funds,

but with competitive grant programs in which universities would submit proposals for facilities. The colloquium has asked President Bush to enlarge the NSF's current \$20 million per year matching-grant program for facilities to its authorized annual level of \$250 million and to start a similar program at the National Institutes of Health.

But in tight financial times, with the war in the Gulf and the S&L bailout burning up billions, such cries may fall on deaf ears. Instead of relief, administrators may find

themselves facing government negotiators filled with a new cost-cutting zeal inspired by John Dingell and his investigators. In that case, according to Rosenzweig: "Universities that are most creative about deciding what they can't do as well as what they can do are the ones that are going to come out of the '90s in the best shape." And among the projects that get slashed for lack of facilities funds, he says, there will be a good deal of cutting-edge science.

■ MARCIA BARINAGA

It Ain't Broke, But Why Not FCCSET?

For nearly a century, the Bureau of Indian Affairs has been keeping detailed records of the growth of tens of thousands of trees as part of an effort to manage forests on Indian land. When members of a committee that coordinates the U.S. global change research program learned of the bureau's data, their mouths fell open. Why? Because the records of tree growth provide a unique indicator of changes in microclimates over the past 100 years, and as Robert W. Correll, head of the geosciences directorate at the National Science Foundation recalls, "it was a major asset we didn't know anything about."

The fact that officials running the federal government's global change program discovered these data buried in a small agency in the Department of the Interior not known for its science programs is one small measure of the new found success of a once obscure body called the Federal Coordinating Council for Science, Engineering and Technology (FCCSET), pronounced "fix-it" by Capitol cognoscenti. FCCSET has been around since 1976, when Congress created the Office of Science and Technology Policy. But it used to be just a talking shop for mid-level bureaucrats. "There was no connection between the information [exchanged] and the people who allocate resources," says Daniel R. Masys, director of the Lister Hill National Center for Biomedical Communications and a member of a FCCSET subcommittee on computer research and development. Then came D. Allan Bromley, the current OSTP director.

Bromley revitalized FCCSET by using it to coordinate big, multiagency programs—in particular, to package their budgets in a single, coherent plan, rather than leaving each agency to plead for its individual piece. The result: three large, multidisciplinary,

multiagency programs that received substantial increases in the Bush Administration's 1992 budget proposal—one in climate change, one in high-performance computing, and one in science and math education. Each owes its identity and direction to a FCCSET committee. The bureaucratic punch of the committees as structured by Bromley comes from the fact that each is made up of cabinet secretaries and heads of independent agencies. As Bromley said in a recent interview with *Science*, "Decisions made in the FCCSET remain made, and don't come unstuck under the final pressures of budget discussions."

The first of the multiagency thrusts to get off the ground was the Committee on Earth and Environmental Sciences, chaired by Dal-

change research program that received from Congress \$294 million of the \$375 million new money requested for it. This year, the Administration is requesting an additional \$231.8 million over last year's appropriation.

The core of the global change program is remote sensing, particularly the Earth Observing System being developed by the National Aeronautics and Space Administration. The 1992 budget request would provide a big increase for efforts to figure out how to handle the torrent of data from these satellites, particularly how to make use of the data in new generations of computer models that predict global climate. There is also new money to accelerate the development of these models.

Another FCCSET committee that successfully steered a new initiative through the federal budget bureaucracy is the Committee on Education and Human Resources, chaired by Energy Secretary James D. Watkins. Last week the education committee released its first report, *By the Year 2000: First in the World*, outlining the roles of some ten federal agencies that support education. The report's title derives from the goal articulated by President Bush in 1989 at the education summit with the nation's governors in Charlottesville, Virginia, that "U.S. students will be first in the world in science and mathematics achievement."

To achieve this goal—which federal officials admit is a long shot—the FCCSET committee proposed making support for precollege education a priority. In particular, the new initiative will focus on teacher training and enhancement, curriculum development, and systemic restructuring of education programs. The next highest priority is undergraduate education, where once again teacher training and curriculum development would receive the

FCCSET INITIATIVES			
	1991 Appropriated	1992 Requested	% Change
HIGH PERFORMANCE COMPUTING AND COMM.			
HIGH PERFORMANCE COMPUTING SYSTEMS	116	157	+35.8
ADVANCED SOFTWARE TECHNOLOGY	217	265	+22.0
NATIONAL RESEARCH NETWORK	58	92	+57.4
BASIC RESEARCH AND HUMAN RESOURCES	98	124	+26.5
TOTAL	489	638	+30.4
SCIENCE AND MATHEMATICS EDUCATION			
PRECOLLEGE	515	661	+28.4
UNDERGRADUATE	417	477	+14.3
GRADUATE	784	803	+2.4
TOTAL	1716	1941	+13.1
GLOBAL CHANGE RESEARCH PROGRAM			
CLIMATE MODELING	60	95	+59.5
GLOBAL WATER & ENERGY CYCLES	417	521	+24.9
GLOBAL CARBON CYCLE	130	163	+25.3
ECOSYSTEMS AND POPULATION DYNAMICS	106	147	+38.8
OTHER RESEARCH ACTIVITIES	241	259	+7.6
TOTAL	954	1185	+24.3

las L. Peck, head of the U.S. Geological Survey. Starting in 1989, working groups of this committee met frequently to define what each agency's role would be in a coordinated approach to the study of human and natural influences on the global environment. By the beginning of 1990 the committee was able to propose a comprehensive federal global