

Many prominent scientists with White House connections are also said to have called to register complaints. Among the organized groups which deplored the rejection of Long were the leadership of the National Academy of Sciences, the National Science Board, and the Federation of American Societies for Experimental Biology, the nation's largest biology group. A key role in working for a reversal of the Long decision was played by Philip Handler, chairman of the National Science Board, who managed to mobilize opposition by key scientific groups without, apparently, undercutting his ability to negotiate effectively with the White House.

While almost all those involved suffered from the original decision to block Long's appointment, the con-

cerned parties seem to have gained in prestige from the reversal of the decision on Long. DuBridge, whose advice on a major scientific post had been originally rejected by White House political aides, now emerges as a man influential enough to help convince the President that he should change a publicly announced decision which allowed political factors to affect the appointment of an NSF director. DuBridge had originally given the impression of being close to President Nixon (*Science*, 21 February). This impression was somewhat dispelled by the rejection of Long, but DuBridge's reputation now seems enhanced by his role in securing the reversal of the decision.

The scientific community has displayed unusual effectiveness in achiev-

ing its goal in the Long incident. It has been successful in giving emphasis to its view that the NSF directorship is nonpolitical and has also proved itself powerful enough to persuade the President that he made a mistake.

It is difficult for Presidents to retract their decisions in public, but it is hard to see that Nixon has done anything but help himself in reversing the Long decision. He has offended very few people, and he seems to have gained a new respect in the scientific community. Furthermore, Nixon's reversal on Long may have enhanced his reputation among the larger public. At little, if any, political cost, Nixon has shown himself to be a man who is not too proud to admit error.—PHILIP M. BOFFEY and BRYCE NELSON

Confrontation at Stanford: Exit Classified Research

Palo Alto, California. The San Francisco Bay area was the cradle of American student militancy, and, in mid-April, activists at Stanford University, halfway down the San Francisco peninsula, made a further advance in confrontation politics.

At Stanford, the precipitating issue was military research performed on the university campus and at the nearby Stanford Research Institute (SRI), which was spun off by the university shortly after World War II and is still formally controlled by the Stanford trustees. What sets the Stanford incident apart from other events in the current long hot spring of the universities was the 9-day occupation of the Applied Electronics Laboratory (AEL) on campus and the interruption of classified work being done there for the government.

The immediate sequels to the sit-in were the decision, announced late last week by Stanford's dean of engineering, to phase out most of the classified work on campus and a faculty move to overhaul guidelines and review machinery in a way that would bar almost all military research from the Stanford campus.

Protestors thus obtained major concessions on a major demand. But the

matter of the Stanford-SRI relationship remains to be dealt with by the trustees, and broader issues of student power and the whole question of the purposes of the university are far from settled as far as the militants are concerned.

Despite the frankly professed radical aims of many of the protest leaders, the Stanford confrontation would hardly have registered on a Richter scale measuring campus violence. The civility of the Stanford occupation can in large part be attributed to the tactics employed by both sides. For Stanford president Kenneth S. Pitzer, in his first year at Stanford, the occupation was obviously a time of testing. Pitzer had made it known that he regarded U.S. involvement in the Vietnam war a "blunder," and he was known to favor the elimination of classified research from the campus. Most important, he did not call in police to clear AEL, thereby avoiding creation of the cops-on-campus issue which has catalyzed student opinion against many administrations.

The protestors, on the other hand, avoided physical violence, property damage, and personal insult likely to estrange the moderates among them, antagonize noninvolved students, or

alarm the faculty. The occupiers lived with locked files of classified documents—tempting game for some of them, but they were aware that anyone who touched classified material was flirting with a federal felony charge. The protestors pledged no damage to the building and no interference with classified information, and even voted a ban on the use of drugs and alcohol in the building, in part to insure that the pledge would be kept.

Criticism of war research at SRI and on campus goes back several years, but the buildup to the occupation seems to have begun last summer when militants dug into military research at SRI and the university and publicized their findings, putting most emphasis on projects they said dealt with research on chemical and biological warfare and counterinsurgency at SRI. Discussion of military research gained some momentum in the weeks after the fall semester began, and in mid-October acting president Robert J. Glaser appointed a 12-member faculty-student committee to look at the Stanford-SRI relationship and to recommend changes which appeared desirable.

Militant students interpreted administration actions as stalling tactics, and, on 14 January, 29 students invaded a trustees' luncheon and demanded that "Stanford get out of Southeast Asia." This led to a public meeting on campus on 11 March, at which five trustees took part in a panel discussion. It was the first time the trustees had been publicly exposed to the full blast of the radical analysis of the university

and to charges that the trustees operate Stanford in the interests of themselves and the corporations they represent. The tone of the militants' criticism of the board is fairly represented by an excerpt from an opening statement by Paul Rupert (Stanford 1967) of the United Campus Christian Ministry.

"Essentially," said Rupert, "I am asking that you transform your lives and your businesses; that you share your power. I am saying that such faith and such willingness are prerequisites for participation in an educational community. If you cannot show that faith, if you do not lay down your weapons, then I can only predict a steady erosion of the hope of non-violent change. Ghettos will burn again, guerrilla strength will grow, your campus will be torn apart. In the face of growing militarization, revolutionaries will study and steal your weaponry and you will have lost your chance."

Momentum Gained

The transcript of the meeting indicates that the trustees were prepared neither for such apocalyptic arguments nor for the "have-you-stopped-beating-your-wives" form of many of the questions. The militants felt that their movement gained important momentum.

At a student meeting on 3 April, a coalition of campus and local community groups was formed, and almost inevitably called the April Third Coalition—later, the April Third Movement or A3M. Students for a Democratic Society (SDS) played a prominent role, and SDS was generally accorded credit or blame for leadership in what ensued.

On 8 April the trustees directed SRI officials not to undertake any new CBW contracts. The next day, in one of the long-running open meetings that was to become its style, the Coalition voted to "take" the Applied Electronics Lab, at which most of the \$2 million worth of on-campus military research at Stanford is performed.

Tactically the move was an astute one. Attention had been focused on SRI, but legally the trustees alone had authority, and the issue was more complex than that of on-campus research. Direct action against SRI would also have been more difficult, since SRI buildings are in Menlo Park, a couple of miles from the campus; also the question of trespass on nonuniversity property was much more ticklish. The student tacticians also observed that the SRI was primarily a problem for the trustees and the faculty had re-

laxed a bit. Switching to AEL put the faculty back on the hook.

The occupation of AEL was the first real success for the Stanford Left. There had been occupations before—an attempt to stage a major protest against CIA recruiting on campus had fizzled—but the Left had never managed to trigger a sustained reaction. SDS until April, as one of its members said, had been "isolated and divided."

Radical activity at Stanford seems to trace back to colonists from the Berkeley Free Speech Movement in 1965, who helped establish a Graduate Coordinating Committee (GCC) for political action. Several other radical organizations have grown up in the university or on its fringes, and almost inevitably a Free University has operated. At Stanford, a small but militant Black Student Union (BSU) has developed, which, like many such groups at other universities, has opted for an independent role. BSU members took little part in the AEL affair.

To an outsider, one thing that distinguishes the Left at Stanford is the quality of its publications. The underground press is usually characterized by shock prose, slapdash layout, and bleary presswork. At Stanford the writing is literate and the polemics are mixed with muckraking research and reporting. The local tradition seems to have been started when the GCC's newsletter was put out by graduates in English, and it is continued in the tabloid *Peninsula Observer*, which was started in 1967 as an outgrowth of Vietnam summer activities. The weekly *Observer* gives a fair amount of space to local political coverage as well as to radical causes at home and abroad, and is described as the "voice of the movement."

The basic radical argument was contained in a mimeographed pamphlet, "SRI," put out by the Coalition and describing military research at SRI and the university. Written in flat, documentary style, it emphasizes fairly detailed allegations on CBW and counterinsurgency research. The pamphlet was widely circulated on campus and seems to have had considerable impact, in part because CBW and counterinsurgency cause particularly sharp campus reactions, and also because SRI, under the usual federal policy governing classified projects, could neither confirm nor deny the Coalition version.

The point is that the militants at Stanford have been unusually ener-

getic in gathering information to support their case and have found effective ways to present it.

Fortuitously, when the AEL sit-in began, the occupiers found they had "liberated" a well-equipped print shop used to turn out classified research papers. The press was put to use immediately, and a daily newsheet, *Declassified*, appeared, as well as a flow of notices, handouts, and working papers on such things as Coalition guidelines for research.

The campus radio station broadcast long segments of the nearly nonstop discussions in the AEL courtyard—the local form of participatory democracy. The building was open to the press and to members of the faculty, many of whom spent long Socratic hours trying to dissuade students from continuing the sit-in. This free rein on self-expression enjoyed by the students seems to have forestalled the complaint that the administration has an unfair advantage in presenting its side of the case publicly, and it may have helped account for the relatively good-tempered tone of the Stanford sit-in.

The atmosphere of the occupation is described by the current West Coast phrase "good vibrations." Doubtless for some of the participants the experience was more important than the objective, but most of them shared the exhilaration of defying authority in what they believed was a just cause, one which, moreover, seemed to be triumphing.

Educational Experience

For the activists, the camaraderie was, in another phrase of the day, "beautiful," but they were perhaps more interested in using the occupation to educate students and faculty farther in their radical analysis of the university.

After the occupation began, the Left appeared less intrasigent as well as much less ineffectual. The change was one of tactics, not of goals, however. Or, as one of the leaders put it, "We are radical but not militant."

For anyone coming back to an American university after time away, it takes almost a quantum jump of understanding at first to grasp what the radicals are driving at.

As Steve Weissman, former Stanford graduate student who is one of the movement's chief theoreticians, and others put it, they are trying to get away from the "military-industrial complex analysis."

"SRI did not just respond to the mar-

ket created by the Korean war. We say SRI is a strategy center and intellectual staging area for the penetration of private enterprise in developing countries," says Weissman.

In this analysis, development projects, including those in education, become "counterinsurgency" programs aimed at the "suppression of national social movements." The connections of university trustees with corporations doing business in Southeast Asia and Latin America thus assumes primary significance.

The Radical View

In the radicals' book, the more serious threat is not the aerospace or mining company executive but someone like Stanford alumnus John W. Gardner, who might argue for replacement of Pentagon contracts in the university with Department of Health, Education, and Welfare programs which, in the radical view, would simply serve imperialism overseas or what they regard as "domestic counterinsurgency" in the cities.

The radicals see a pattern of collusion as well defined and extensive as in any right-wing conspiracy theory. And in this picture the university is a deeply, perhaps fatally, flawed institution.

At Stanford the faculty has been greatly unsettled by the student action and the radical critique of the university. The impression conveyed in the first days after the sit-in began was that the faculty knew very little of the details of military research at SRI or on campus and that they were unprepared to take the action forced on them.

Many agreed with students' aims in respect to SRI and on-campus research. While most certainly disapproved the occupation of AEL, many, especially among the younger faculty, felt that the students were fighting the faculty's battle.

At the same time, they were stung by the militants' charge that the faculty was hypnotized by "procedural issues" and a concern for due process "while children were dying." Some were obviously deeply disturbed as students appeared to reject the faculty's moral authority and question academic values.

Faculty opinion, to the surprise of some liberals, crystallized solidly behind a move to end classified research on campus, and a faculty assembly held after the AEL was evacuated by the protestors gave Pitzer a standing

ovation for his "firmness and restraint" in handling the sit-in.

While the occupation was still on, the report of the committee appointed by Glaser was made public. A majority of the committee members recommended that the university divest itself of ownership of SRI under a covenant which would prohibit SRI from doing particular kinds of military research. A minority report reflecting prevailing radical views asked that SRI be tied closer to the university and that it be converted into an institution doing only socially useful research. (The progress of the Stanford-SRI debate will be discussed in a later article.)

As the occupation wore on, the difficulties of finding simple solutions to the complex problem of making comprehensive rules for regulating federal research on campus became more evident, and the faculty, particularly scientists and engineers, became involved in efforts to make rules which would not require that the baby be thrown out with the bathwater.

At an open-air session attended by upward of 8000 people on the day the occupation ended, Stanford physics professor Wolfgang Panofsky, director of the Stanford Linear Accelerator Center, touched on some of the complexities in some well-received comments on university research. He concluded with the following observations on how he felt the rules should be changed.

"(1) I believe the University has the duty to establish policies that exercise some control as to what research can or cannot be done under its own auspices. It should not establish rules as to what individual members of the University do in activities not connected with the University.

"(2) I feel the University in the future should not sponsor research whose output is classified—that is, where the product of the research would be papers or gadgets which are not open for everyone to read or to see and where not any interested student can participate in the work.

"(3) Those members of the university community who personally feel that to guide their work intelligently they should have access to classified information should have the privilege to secure such information.

"You may wonder why I made the last remark—namely, why I said that individual members of the community should have the right to obtain access

to classified government information. Let me tell you a story: Some of you may have heard that I had some recent involvement in Washington about some testimony concerning the antiballistic missile system. Senator Fulbright, one of the foes of the ABM in Congress, was criticizing the Defense Department for being lax in getting enough outside advice to guide its decisions. Fulbright was criticizing that all testimony the Defense Department was presenting to him either came from the Defense Department itself or its defense contractors. I was asked to testify before his committee and contradicted many of the technical facts which had been presented. Later I had the privilege of having lunch with Senator Fulbright and he continued to deplore the parochialism of the Defense Department and he also deplored the involvement of the Defense Department in the universities. The question is, then, 'Where should the outside advice come from?' And here we have a dilemma—on the one hand we deplore that the Defense Department is isolating itself from outside sources of information while at the same time we decry that people in the universities are too involved in Defense Department secrets. I therefore feel that those members of the university community who individually wish to remain independent constructive critics of the 'establishment' must maintain contact with the establishment and learn what its problems are. I feel that those research workers who work on fully open research still may wish to have knowledge of what goes on in their field in the outside world. A university, to do its basic work in advancing knowledge and education, must maintain its windows open to see the world but should exercise collective moral restraint as to what kind of work it advances."

Faculty Resentment

In the aftermath of the occupation some faculty members are bitterly resentful of what they regard as a surrender to coercion. The most conspicuous casualties are the graduate students whose dissertations depend on projects which will be phased out. And some faculty go as far as to suggest that, under the new rules, the high quality of engineering and applied science research at Stanford will decline.

President Pitzer seems to have handled the occupation in a way that a majority of both students and faculty

approve. Whether the trustees and alumni will ratify this opinion remains to be seen. Violence was averted in April at Stanford, but the new judicial machinery set up, in consultation with students, to handle emergencies such as the sit-in suffered a more-than-minor breakdown when both student activists and some faculty failed to cooperate. The viability of university self-government at Stanford therefore remains unproved.

Important issues at Stanford are unresolved, and the results of the April confrontation must be viewed as inconclusive. The issue of classified research on campus was one on which a near-consensus was possible. Whether the radicals can mobilize the "moderates" on other issues on the radical agenda remains to be seen. As one radical said, "A lot of these people still have this authority hangup." Certainly the radicals will try, and Stanford, like other universities, seems to have embarked on an era when it must reform itself and defend itself at the same time.

—JOHN WALSH

APPOINTMENTS



P. R. Lee



W. H. Stewart

Philip R. Lee, former assistant secretary for health and science affairs at the Department of Health, Education, and Welfare, to chancellor of the University of California's San Francisco Medical Center. . . . **William H. Stewart**, Surgeon General, U.S. Public Health Service, to chancellor of the Louisiana State University Medical Center. . . . **James H. Meyer**, dean of Agricultural and Environmental Sciences at the University of California, Davis, to chancellor of Davis. . . . **Merle L. Borrowman**, professor of educational policy studies and history, to dean of School of Education, University of California, Riverside. . . . **Wesley J. Hennessey**, executive dean of the School of Engineering and Applied

Science at Columbia, has been elevated to dean of that school. . . . **John J. Bergan**, vascular surgeon, to scientific director of the American College of Surgeons—National Institutes of Health Organ Transplant Registry. . . . **W. Gerald Austen**, chief of the Surgical Cardiovascular Research Unit at the Massachusetts General Hospital, to chairman of Harvard Medical School's Department of Surgery at MGH. . . . **H. Stanley Bennett**, former dean of the division of biological sciences at the University of Chicago, will move to the University of North Carolina at Chapel Hill as the Sarah Graham Kenan professor of biological and medical sciences and chairman of the department of anatomy. . . . **Clifton O. Dummett**, chairman of the department of community dentistry at the University of Southern California, to president of the International Association for Dental Research. . . . **Arthur Bushel**, deputy health commissioner for New York City, to chairman of the department of public health at the Johns Hopkins University School of hygiene and public health. . . . **Thomas N. Lynn**, professor of preventive medicine and public health, to chairman of that department at the University of Oklahoma School of Medicine. . . . **Harvey L. P. Resnik**, director of psychiatry at the E. J. Meyer Memorial Hospital in Buffalo, N.Y., to chief of the Center for Studies of Suicide Prevention, National Institute of Mental Health, National Institutes of Health. . . . **E. Hunter**, chairman of the division of science and mathematics at the State University of New York at Binghamton, to the newly created position of executive assistant to the president at the university. . . . **Robert C. Baldrige**, associate dean of the graduate school at Temple University Health Sciences Center, to assistant vice president for research at the center. . . . **Dale F. Redig**, chairman of the department of pedodontics of the College of Dentistry of the University of Iowa, to dean of the University of the Pacific's School of Dentistry in San Francisco. . . . **Richard D. Burk**, chairman and professor of physical medicine and rehabilitation at Southwestern, to dean of the Allied Health Sciences at Dallas. . . . **Malcolm W. Jensen**, manager of engineering standards and chief of the Office of Weights and Measures at the National Bureau of Standards, to deputy director of the Institute for Applied Technology at NBS.

RECENT DEATHS

Charles H. Danforth, 85; professor emeritus of anatomy and former chairman of the department of anatomy at Stanford University; 10 January.

Laurent Feinier, 76; former clinical professor of neurology at the Long Island College of Medicine; 1 April.

Don C. Foote, 37; associate professor of human geography at the University of Alaska; 1 March.

Ward C. Halstead, 60; director of medical psychology at the University of Chicago; 25 March.

Titus Harris, 75; retired chairman of the department of neurology and psychiatry at the University of Texas Medical School; 22 April.

Leonard Haseman, 85; emeritus professor and former chairman of the department of entomology at the University of Missouri, Columbia; 29 March.

Glen M. Iddings, 47; radiochemist formerly at Lawrence Radiation Laboratory, Livermore, California; 15 March.

Eugene W. Kettering, 60; president of the Charles F. Kettering Foundation and vice chairman of the Sloan-Kettering Institute for Cancer Research; 19 April.

Elizabeth R. Laird, 94; former head of the physics department at Mount Holyoke College; 26 March.

Joseph R. Levenson, 48; Sather professor of history at the University of California, Berkeley; 6 April.

Jonas N. Muller, 49; former chairman of the department of preventive medicine at New York Medical College; 26 March.

Alfred C. Nichols, 69; executive director of the New York Diabetes Association; 11 April.

Donald S. Po-Chedley, 51; chairman of the biology department at D'Youville College, New York; 1 April.

Carl D. Shoemaker, 86; first secretary of the National Wildlife Federation; 2 April.

George W. Vinal, 86; retired National Bureau of Standards physicist; 8 April.

Luther F. Witmer, 85; emeritus associate professor of metallurgy at Lafayette College; 28 March.

Erratum: The following editorial errors occurred in conjunction with the photo cover, "Organelle with a large inclusion of crystalline protein in a parenchyma cell of a tobacco leaf" (21 Mar.). The micrograph intended as a replacement was not used. Consequently the magnification given in the caption is incorrect for the cover photo shown. Magnification should be 170,000 not 220,000.