

new research branch. Once consigned to a niche in the physical sciences division of the research and development branch, CTR now rates a division all its own in the new research unit. Thus promoted, fusion research will compete for funds within the AEC on a footing of equal influence with all the combined programs of the physical sciences.

Implicit in the elevation of CTR research is the AEC's intention to put new emphasis on demonstrating the technical feasibility of controlled fusion. "Without engaging in a crash program," Schlesinger says, "we are eager to press on, to push it as rapidly as seems appropriate in the light of a long-term program." He said that the AEC hopes to begin "major construction" of new facilities sometime "in the next couple of fiscal years."

Other sources say this construction would almost certainly involve building as many as three large new experimental machines—each to test a different approach to sustaining a fusion reaction. The goal of the machines would be to achieve a fusion plasma hot enough and dense enough to release as much energy as needed to kindle it. The first machine to reach this "break even" point will be regarded as having demonstrated the feasibility of controlled fusion, much as Enrico Fermi's atomic pile at Chicago opened the way to fission reactors. Roy W. Gould, the director of the new CTR division, has said that a stepped-up program such as this would cost \$616 million through 1980, or about twice

what the AEC said last year that it planned to spend on civilian fusion work in the 1970's.

For the national laboratories—especially for those not heavily involved in weapons work—the new regime at headquarters promises to bestow mixed blessings. In one respect, the new emphasis on nonnuclear R & D should provide added opportunities for the laboratories to show, as they have long clamored to do, that big science and high technology can be applied to the problems of society. Moreover, a new measure of freedom for the laboratories is in the offing. Although the reorganization changed nothing fundamental in the laboratories' relations with the AEC, some laboratory directors will now find themselves communicating with assistant general managers, one notch higher than their divisional ties of the past.

What this means, says Schlesinger, is that the laboratories won't have to package their commodities—their programs—in terms of narrow divisional interests:

"We want to provide greater leeway to the labs so that, if they get a damned good idea, they can work on it without having to distort it to sell it."

Audible sighs of relief may be restrained, however, in the knowledge that with freedom comes a new measure of discipline:

"There has been an atmosphere in the labs wherein a researcher who doesn't want to work on an assigned task doesn't have to—that this is all part of the spirit of free inquiry. Well,

we can't automatically permit researchers to follow this proclivity. Development tasks such as the LMFBR [liquid-metal fast breeder reactor] have got to be done, and hopefully on some kind of rough time schedule."

Whip-cracking was never a hallmark of the Atomic Energy Commission, least of all during the Seaborg years. Schlesinger's predilection for it—evidenced in his scolding of the nuclear industry, and elsewhere—signals the advent of a new and very different style of administration at the AEC. How much this style, and the renovations of the agency already accomplished, will alter the character of the AEC can scarcely be guessed this soon. But it's safe to say that the AEC has reached a watershed in its history.

At the age of 25, of course, the commission is still young. But the pull of the past upon the present has been stronger here than in most agencies; many of the commission's key staff have been part of it from the very beginning. They helped to shape its policies and its character in the late 1940's and to preserve its personality through the years. Now the dominion of the visionaries is gradually ending. At the quarter-century mark it seems as if the spirit of Manhattan is near its last hurrah.

In place of the visionaries are coming the grimmer pragmatists of the Nixon team. They are bringing with them an instinct for firmer management and, perhaps, a new sense of purpose for the AEC.

—ROBERT GILLETTE

University Women's Rights: Whose Feet Are Dragging?

When the Department of Health, Education, and Welfare (HEW) hand-delivered to Columbia University President William J. McGill on 4 November 1971 a letter that threatened cutoffs of federal funds to Columbia if the university did not provide certain data on hiring and promotion of women and minorities, it seemed to many that HEW was setting the stage for a crack-down on the issue of discrimination in universities.

The move against Columbia was prompted, like many of HEW's recent university investigations, by charges filed in January 1970, by the Women's Equity Action League (WEAL). Since then, WEAL's head, Bernice Sandler, has organized the filing of charges of alleged discrimination at about 260 campuses.

The WEAL charges have sparked a lot of reaction: Increased activity by women's liberation advocates, an ap-

pearance by Sandler on the NBC *Today* show, and several HEW investigations. Sky-high hopes have been raised concerning the prospects for proportional representation of minorities and women on faculties, equal admission of women to all colleges, equal consideration for financial aid, and the like. Indeed, starry-eyed proponents of women's rights have promised that their movement could ultimately transform the university scene far more than has the campus-based radical antiwar movement of the last 5 years.

But the feminists may be frustrated by HEW's performance. Already, some are critical of civil rights chief J. Stanley Pottinger for not enforcing the rules. Pottinger and HEW staff reply that the program of enforcement is only just getting under way.

But despite the fact that Executive Order 11246, as amended, has been on the books for 4 years saying "the contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin," to date no university contract has been terminated by HEW, and no hearings have been held concerning termination. Eleven colleges and universities have, however, had "holds" placed on new contract signatures, and about the same number have drawn up affirmative action plans.*

Among HEW staffers, university spokesmen, and feminist critics, there is some consensus on the causes of HEW's sluggish performance in university civil rights. Lack of staff is the first reason given by all. To this the critics add HEW's alleged reluctance to use the sanctions at its disposal. A related problem has been that of extracting vital employment data from recalcitrant universities. And even the affirmative action plans, required by executive order, fall below some expectations. The 12-page letter which HEW delivered to Columbia, hitherto confidential but obtained by *Science*, offers another reason for delay; the university has been almost perverse in not complying with government requests.

In HEW's arsenal for insuring that the 2300 universities with federal contracts do not discriminate, the principal weapon is "contract compliance." Technically, if a government contractor is found out of compliance with federal rules in one part of his organization, then all federal funds flowing to the whole institution may be withdrawn. However, with the prohibition on discrimination by federal contractors, it hasn't worked that way.

* The 11 colleges and universities are Harvard, University of Michigan, Columbia, Cornell, and Duke, all with funds actually delayed, and St. Louis University, Yeshiva, University of Rochester, New York University, University of Pittsburgh, and Northwestern with holds, but no funds delayed. (Data from HEW.) In 1970, before the university women's rights movements developed, the U.S. Commission on Civil Rights attacked government contract compliance programs as being inadequate. Mainly these were efforts by the Department of Defense to get contractors to use the same rest rooms for blacks and whites, or adequate housing for all employees. Two prominent cases were the 1968-69 negotiations with Dan River Mills, Burlington Industries, and J. P. Stevens & Co., Inc. charged with reserving better-paid jobs for whites, and segregated housing, and McDonnell Douglas Corp., which signed a \$7.7 billion contract with DOD although there was evidence of discriminatory practices, and violation of regulations. See "Federal Civil Rights Enforcement Effort" submitted to the President, September 1970, by Theodore M. Hesburgh, chairman, and the U.S. Commission on Civil Rights, pp. 42-85, for a general history of U.S. contract compliance efforts by the federal government.



Bernice Sandler

To actually cut off, or "terminate," ongoing contracts to universities has proved unbelievably difficult. The government must investigate, make a responsible legal case that violations exist, and hold a due-process hearing. This procedure is designed to protect the rights of the contractor, but in fact it is so clumsy that HEW has never used it. To date no university contract has been terminated, nor have any hearings been held, despite the fact that, according to one staffer, "we find noncompliance at virtually every campus we visit."

Short of starting to cut off contracts and renewals, HEW can, and has, put a "hold" on the signing of new contracts with 11 colleges and universities.* This is a quicker, simpler, enforcement mechanism, and many college administrators vouch for its effectiveness in spurring them to action. Critics say that these holds are not enough.

For years, HEW had a staff of 17 to insure nondiscrimination in some 2000 universities, three times that number of hospitals, and hundreds of HEW-funded construction projects. Now, after what top government observers describe as Herculean efforts by the Office of Management and Budget to resist federal personnel cuts and budgetary belt-tightening, HEW has slots for 96 contract compliance investigators—and most of them are filled. The investigators are spread out over nine regional offices and are swamped.† One regional civil rights chief says "We could use all our staff just to answer the mail."

Ninety-six people investigating 2300

colleges and universities might be viewed as inadequate, yet in recent months, several memos and directives, says John L. Wilks, director of the Office of Federal Contract Compliance (OFCC), have instructed all agency contract compliance staffs, including HEW's to investigate federally funded construction projects.

In HEW, this means that the 96 staffers, many of whom in the last year have been learning the ruses of university personnel offices and the Byzantine maneuverings of faculty promotion schemes, are now attending training sessions dealing with carpenters' and plumbers' unions. Wilks admitted to *Science* that HEW's contract compliance efforts "because of a lack of staff have been bogged down" already. But it would seem that to reassign them to the construction industry would add to their chores in such a way as to make the shortage almost ludicrous.

Some officials are willing to admit, privately, that, in the silent language in which bureaucrat and policy-maker often communicate, to assign a staff of 96 to achieve such sweeping reforms is a signal that perhaps their goals aren't so important anyway.‡

That the program is understaffed is the one proposition on which both the feminist critics and HEW officials, including civil rights chief J. Stanley Pottinger, all agree. On the question of HEW's use of the legal sanctions it wields—contract termination and holds on the signing of new contracts—there is considerable disagreement.

Pottinger told *Science* that his office has used adequate sanctions in every case where violations of the Executive Order have been found to exist. Speaking of contract termination—a device that his office has never yet used on a college or university—he said, "termination is like execution. You wouldn't

† Throughout government, the number of authorized posts for contract compliance staff has risen from under 400 to 1500. This miracle is said to have been wrought by George P. Shultz, director of OMB and former Secretary of Labor. Shultz is said to have a personal commitment to the cause of civil rights, and observers agree that he in fact exercises more influence over federal contract compliance—particularly the recent boom in staff positions and high level concern for construction trade discrimination—than does Pottinger or his counterparts in other branches of government.

‡ The New England regional office, for example, has six staffers to look at several hundred colleges and universities for six states. Boston office spokesmen estimate they need ten times that number to take care of New England's plethora of educational institutions. But recently, the staff was given a series of training sessions on how to investigate the construction industry. Staffers there and elsewhere simply question whether the government is serious.

find a serious reporter trying to measure the effectiveness of a law enforcement program by how many executions had been carried out. You would measure it by how much crime is or isn't taking place."

However, according to the government's civil rights watchdog, the U.S. Commission on Civil Rights, "use of sanctions and the collection of significant racial and ethnic data," are "essentials" of a "successful contract compliance program." Indeed, advocates of civil rights in other fields, such as school integration, often vouch for the need to use sanctions and to use them frequently enough to make the government's intentions of ending discrimination credible.[§]

Feminist critics of HEW's role say that HEW has not been tough enough. "They just don't enforce the order," says Sandler. Sylvia Roberts, a lawyer for Ina Braden, a University of Pittsburgh assistant professor whose claim of discrimination was thrown out by the local HEW office, says of HEW, "They seem to be totally unwilling to take one institution, investigate it, issue holds on contracts, and really follow through. We cannot look to HEW to do this for us." As a result of HEW's treatment of her case, Braden is now pressing her claim in court.

Columbia's case shows how the use of sanctions and the collection of data—both "essentials" for good contract compliance—have become so intertwined and tangled that discrimination just continues.

Columbia and HEW began negotiating in January 1969. Three years later, the university still has no acceptable affirmative action plan.

The letter from HEW to Columbia is principally a chronicle of the negotiations between HEW and OFCC officials and Columbia since January 1969. It is 12 pages long, addressed to Columbia President McGill, and signed by Pottinger. It enumerates the reasons for the hold now placed on new contracts, and the fact that HEW lawyers will proceed toward a due-process hearing if the university continues with its practice of noncooperation.

The chronicle of negotiations shows that it was not only HEW's feet that



J. Stanley Pottinger

were dragging: Columbia's administration stalled on a number of key requests—mainly that of data collection—from Joseph F. Leahy, chief of HEW's New York office of civil rights, contract compliance branch. Some samples:

March 4, 1969: Mr. Leahy arrived on the campus to conduct the compliance review and found that only three of the 12 items which he had requested in his 31 January letter were available.

Later:

March 5–26, 1969: Mr. Leahy made numerous telephone contacts with Dr. Ralph Helford, Vice President for Special Projects, in an attempt to set up a meeting with University officials, including the Acting President, Dr. Andrew W. Cordier. . . . All these efforts were unsuccessful.

According to the letter, by November 1969, after several HEW requests for an affirmative action plan,

Mr. Leahy contacted the university by telephone to ascertain the status of the university's affirmative action program and was advised that it had not been developed.

A year and a half later, in February 1971, when HEW investigators arrived on campus to view the data that they had requested, Columbia vice president Charles Goodell handed them a computer printout of all employees, but without a breakdown by race, sex, or organizational unit.

At the conclusion of the letter, Pot-

tinger informed McGill that the second affirmative action plan submitted in July, 6 months later, still lacked basic data and analyses of current employment. Pottinger called the years of delays, "unexplained" and "exorbitant."

Yet, even after all these negotiations about data, when HEW put the 4 November hold on signing of new federal contracts, President McGill, according to the *New York Times*, got up before the university senate and said that Columbia's "problem is not that we are charged with discriminating—we are not charged with discrimination and we do not discriminate. . . . Columbia's problem is that it is difficult to prove what we do because it is exceedingly difficult to develop the data base to show, in the depth and detail demanded, what the university's personnel practices in fact are."||

HEW contract compliance officials explain that they cannot responsibly proceed to cut contracts or hold up new ones without a defensible, mathematical proof that a pattern of discrimination exists. However, in Columbia's case, the university, by arguing that the data base is very "difficult to develop" in "adequate" "depth and detail" (or by arguing that its personnel files are confidential, as Harvard attempted to do in 1970 when HEW demanded similar data), university administrators can effectively thwart HEW from imposing its sanctions.

Pottinger told *Science* that the sanctions have been applied whenever HEW has been able to make a case, but the principal problem has been getting the information. He added that he felt the information issue is "ultimately a red herring," since the universities are legally obligated to submit the data HEW requests. However, so far, the information red herring has proved to be a rather big fish.

Pottinger's philosophy on sanctions is "our objective is not to punish. Our objective is to bring them into compliance. When a university doesn't want to comply, then a strong enforcement action will have wide ramifications." Feminist critics, however, contend that the "holds" on new contracts which HEW announces from time to time affect only small contracts, do not last very long, and are easily evaded by the bureaucracy. Once the university comes to the bargaining table, the sanction stops, but the alleged discrimination continues.

|| *New York Times*, 6 November 1971, p. 24, column 1.

[§] An excellent description of how this process works is contained in a book written by Pottinger's predecessor, Leon E. Panetta, *Bring Us Together: The Nixon Team and Civil Rights Retreat*, Leon Panetta and Peter Gall (Lippincott, New York, 1971). Panetta was frequently described by the press as a "liberal" on civil rights. Pottinger rarely has been awarded this label.

Although two new contracts with Columbia have been delayed, the Office of Naval Research just signed a \$1.9 million contract renewal with Columbia's Lamont-Doherty Geological Observatory. This dramatized the fact that, through continuing contracts and renewals, a big university can go on doing business as usual with the government—even when sanction have been imposed by the Office of Civil Rights.

Bureaucracy

The federal bureaucracy has an array of tactics worthy of pro football to block, dodge, and outrun the enforcers. At the University of Michigan, there have been persistent rumors that some new contracts were signed and that some new projects—expected in the form of contracts—went through as grants during the period October through December 1970, when HEW had placed a hold on signing of new contracts in the university. Asked to comment, one HEW spokesman says “we are unaware that anything illegal happened.”

HEW has placed holds on new contract signings at one time or another at 11 universities and colleges. But only five of these actually experienced delays in funds. One regional civil rights staffer explains that the contract officers both in the university and in government are adept at dodging the holds. Anticipating that the ban won't last, they keep a contract sitting on their desks, allegedly tied up in paper work, until the hold is lifted. By not submitting the document for signing the bureaucrats evade the whole messy issue of discrimination and non-compliance.

Finally, according to one university contract officer, the contracting officers in the various federal agencies vary widely in their commitment to civil rights. Some are highly conscientious and respect the hold. They even bring pressure to bear on university officials to cooperate with HEW. However, others are more interested in business as usual, and will avoid the bother of delays or holds.

So far, feminist criticism has been directed at HEW procedures. A separate problem, however, is the substance of the reforms HEW approves: the affirmative action plans themselves. *Science* has obtained a number of proposed and ongoing affirmative action

Table 1.**

	Projected	Hired
Total faculty	595	575
Majority men	7	61
Minority men	9	4
Majority women	14	9
Minority women	5	1

** From the affirmative action program report, 11 November 1971, University of Pittsburgh, Faculty of Arts and Sciences.

plans—of varying degrees of confidentiality.

The goals for hiring of women in the plans, however, are often blueprints not for change but for keeping the status quo. Some of the plans that HEW has approved, Pottinger admits, “are not as strong as they should be,” which raises the question as to why HEW approved them in the first place.

The current feminist theory on how to calibrate hiring and promotion of women to top faculty posts is to aim for women's representation in proportion to the number of women Ph.D.'s in current and future labor pools.¶

But at the University of Michigan, the hiring goals in the current proposed affirmative action plan would keep the percentages of women in the faculty unchanged. Full professors, in 1970–71 were 4.5 percent of the faculty. In 1973–74 they will number 78 out of 1177 or 6.6 percent. Associate professors who are women, now 11.2 percent, are to rise to only 13.9 percent by 1973–74, or 96. Women assistant professors, who in 1970–71 were 14.4 percent will rise to 27 percent. Yet, nationally, of all graduate students, women now are 41 percent and graduate enrollments of women graduate students rose by 9 percent.

HEW has had Michigan's latest proposed affirmative action plan for ten months without public comment—or approval. HEW received the University of Pittsburgh's affirmative action plan 14 months ago. The plan outlined the following hiring goals for the fall 1971. Projected faculty size was to be 595. But the actual hiring carried out in the last year resulted in a faculty of 575, or 20 members smaller than planned. The breakdown is shown in the Table 1.

A final problem with the hiring

¶ According to a Wesleyan draft affirmative action program (there are 25 women and 11 minority members of a faculty of 305) the college plans an “increase in the number of minority persons and women on the faculty in proportion to the number of Ph.D.'s in the national pool by field by 1980.” This is apparently a typical manner of calculating hiring goals.

goals—both modest and ambitious—and with implementing them is, as any physics Ph.D. knows, there are very few faculty jobs available. The shortage of university funds is making particularly so-called “soft money”—which now provides research jobs to many academic women—to disappear. University spokesmen say that the job market for women is shrinking at the fiscally pressed university too fast for even a vigorous affirmative action program to significantly increase hiring of women. “We're struggling hard in affirmative action to stay where we are,” says a spokeswoman.

At Stake Are Votes

By Pottinger's own analogy, progress in contract compliance should not be measured by the number of “executions” but by “how much crime is or isn't taking place.” The trouble is that such measurements have been impossible hitherto because HEW does not make the details of affirmative action plans, such as hiring goals, public. Pottinger told *Science* that he wants to make a requirement that the plans be made public. Policy on this, however, is dictated by OFCC, not HEW, and is now under review.

In sum, contract compliance is proving a clumsy mechanism for women's groups anxious to make rapid changes at their universities. At present, it is easy to find criticisms of HEW's performance to date, but difficult to find suggestions for legal or administrative alternatives to the contract compliance route.

As the 1972 Presidential election year gets into full swing, both advocates and opponents of the older, better known civil rights causes, such as busing and Southern school integration, will be eyeing the record of the Nixon HEW team, including Pottinger.

In addition, those who favor immediate appointment of more women to university professor's chairs, and those who are opposed to it, will be asking how well the team has done.

They may find that HEW has done all it can in getting the new program under way and using its limited staff to advantage. Or they may, as have some feminists discover “a sorry record.” WEAL will have to decide how much heat to put on HEW, and whether to oppose Pottinger personally on the grounds that he has done too little too slowly.—DEBORAH SHAPLEY