

The FY '72 budget for NASA seems to reflect no major changes in the Administration's post-Apollo plans. Funding would be held at slightly over \$3 billion in FY '72. Three more moon landings are still scheduled, although a stretch-out in launch dates of Apollo 15, 16, and 17 is contemplated. Work on a manned orbiting space station called "Skylab" is going forward, but a cut from \$190 million to \$100 million in FY '72 funds for a two-stage reusable space shuttle indicates that on the shuttle the Administration desires mainly to be keeping its options open. "Grand tour" unmanned missions to the planets are still scheduled for the later 1970's. Funds for basic research would be cut from \$286 million in the current year to \$234 million next year, but it is too early to detail where these cuts would fall.

Research on environmental problems and consumer protection is a growth area of the budget, and this is especially evident in new agencies whose research budgets show the effects of program transfers. The Environmental Protection Agency, which finances R & D in the areas of water and air pollution, pesticides, radiation, and solid wastes, would have a research budget of \$155 million. Research on highway safety in the Department of Transportation will double, with an increase of \$28 million.

At a budget briefing last week, presidential science adviser Edward E. David, Jr., emphasized that the budget is a "policy document," and said it testified that R & D was a high-priority item to the Nixon Administration and proved that the Administration was determined that the United States

should "maintain and widen" its world position in basic research. He added that the budget was a message to the scientific community that it "can look to the future with confidence."

It must be observed, however, that, although significant funding increases are in the budget, they are, so to speak, far from in the bag. An upturn in science funding still seems to depend on the two factors that caused the plateau in R & D spending—Vietnam and inflation. The new science budget is part of an expansionary economic policy designed to fight unemployment but hold inflation at a tolerable rate. If deficits grow too great this year or next, science spending, which remains one of the most readily controllable federal expenditures, will still be one of the most vulnerable to cutbacks.

—JOHN WALSH

Corporate Responsibility: Group Rates Company Social Performance

Public concern over what corporations do besides making money has found increasingly sophisticated and effective expression in recent years. Most efforts made on behalf of the consumer, such as those of Ralph Nader and the Project on Corporate Responsibility (Campaign GM), are geared for attack and are inclined toward litigation or pressure tactics. Now a quiet supplement to the consumer advocacy movement, the Council on Economic Priorities (CEP), is setting out to show that facts, if furnished to the right people, can help redirect the priorities of corporate America.

CEP is a research and information group whose aim is to find out what companies are doing in four areas of social responsibility: pollution control, minority employment policies, foreign investments (company policy in countries with repressive regimes), and involvement in the production of war materials.

Although only a little over a year old, the council has already had some impact. As a result of a report that revealed Honeywell Corporation to be a large manufacturer of antiper-

sonnel weapon parts, CEP says, a major mutual fund in New York City (which asked CEP that its name be withheld) unloaded all its Honeywell holdings.

The council's reports are read by people in corporations, universities, investment companies, government agencies, and social action groups, as well as by individual investors.

One subscriber is Roger Murray, who until recently headed Columbia University's \$1.5 billion College Retirement Equities Fund. Murray regards CEP as a valuable source of information which, he has found, is otherwise very difficult to obtain. Information on the minority hiring policies of a company has influenced at least one of his investment decisions.

The Chase Manhattan Bank uses CEP as a source of information in its Technical Assistance Division, a new department designed to evaluate the impact of the bank's money on environmental quality and to structure programs of financial aid aimed at accelerating a given company's pollution control efforts. Robert Aldrich of the bank says CEP is off to a "fine start"

in contributing to the "dialogue that is being set up between the public and industry."

The group has issued two large research reports up to now. One of them, published in book form by Harper & Row, contains profiles of 105 corporations under the title *Efficiency in Death: the Manufacturers of Anti-Personnel Weapons*. It lists the dollar value of and the equipment manufactured under each company's "anti-personnel" contracts, as well as each company's products, sales, financial worth, and the names of its officers and directors. The other report, entitled "Paper Profits," is a 400-page, statistic-laden rundown of the efforts of 24 major pulp and paper producers and their 131 mills in combating their own pollution. Released in December, the report has given CEP its widest publicity so far. Soon to be completed is a report that relates the activities, in the four areas of social responsibility, of 50 of the nation's largest corporations in six major industries: automobile, paper, steel, oil, airline, and chemicals.

The idea for such an information organization had been germinating for some time in the minds of several anti-war activists. But it was formed largely through the zeal of Alice Pepper, a brainy, winsome, 26-year-old Wellesley graduate. Miss Pepper was a securities analyst for a small Boston firm when a Jewish synagogue approached her, \$250,000 in hand, and asked for a list

National Medal of Science Winners

Last week the White House announced the National Medal of Science winners for 1970. The award, established in 1959 and presented annually, is the highest award of the federal government for distinguished achievement in science, mathematics, and engineering. The recipients are:

Richard D. Brauer, Harvard, for his development of the theory of modular representations.

Robert H. Dicke, Princeton, for his studies of cosmology and of the nature of gravitation.

Barbara McClintock, Carnegie Institution of Washington, for establishing the relations between inherited characters in plants.

George E. Mueller, General Dynamics Corporation, New York, for contributions to the design of the Apollo System.

Albert B. Sabin, Weizmann Institute of Science, Israel, for contributions to the understanding of viruses and viral diseases.

Allan R. Sandage, Hale Observatories, California, for unraveling the evolution of stars and galaxies.

John C. Slater, University of Florida, Gainesville, for contributions to the basic theory of atoms, molecules, and matter in the solid form.

John A. Wheeler, Princeton, for his contributions to our understanding of the nuclei of atoms.

Saul Winstein (deceased), University of California, Los Angeles, for contributions to the study of mechanisms in organic chemical reactions.

—S.B.M.

of companies with minimal involvement in defense contracting. The resulting "peace portfolio" was later advertised in the *New York Times* and drew an impressive 600 replies. With this vote of confidence, Miss Tepper assembled such friends and associates from the worlds of business and peace as Lindsay Mattison, director of the World Federalists, and the Rev. Edgar Lockwood, Washington, D.C., minister, former lawyer, and antiwar specialist. Together, they mapped out plans for CEP.

Its financial resources are slender, furnished entirely by subscriptions and private donors, but CEP's work is informed and supported by a wide range of unpaid board members and consultants from the realms of finance, government, business, and social activism.*

* In addition to Tepper, Mattison, and Lockwood, the following persons are on the 14-member board: Sam Brown, coordinator of the Vietnam Moratorium; Thomas Alder, former lawyer for General Motors and chairman of Washington's Public Law Education Institute; Harley Radin, Washington area engineer; Fred Dutton, politically active lawyer and member of the University of California Board of Regents; Hazel Henderson, free-lance writer and environmental specialist; Frank M. White of the National Council of Churches; Thomas Asher, Washington, D.C., lawyer; Timothy Collins, president of Collins Securities in New York; William Samuels, New York lawyer; Stanley K. Sheinbaum of the Center for the Study of Democratic Institutions in Santa Barbara; and Edward Swan, Jr., New York businessman.

Among the most active of the consultants is Barry Commoner, director of the Center for the Biology of Natural Systems at Washington University in St. Louis. Other scientific consultants are George Wald, Nobel laureate in biology, and Leonard Rodberg of the Federation of American Scientists.

Originally CEP, which has earned the informal title of "the Dun & Bradstreet for the socially concerned," intended to confine its studies to corporate war contracting; but pollution, minority hiring, and foreign investments soon gained equal attention. The group at one point considered the establishment of a "peace mutual fund," but the idea was abandoned because, said Miss Tepper, "the concept is too important to risk on any investment vehicle." The council also briefly planned to analyze the social responsibility quotient of any institutional stock portfolio, but this service was scrapped as being too risky, since the organization is not registered as a securities analyst, and the line between informing and giving advice was adjudged too thin.

CEP now has two offices, one in New York and one in Washington,†

† Offices are located at 1028 Connecticut Avenue, NW, Washington, D.C. 20036, and 26 Beaver Street, New York 10004.

with a full-time staff of about 15 divided between the locations. No one earns much money, which partially explains why much of the responsibility has fallen to young women with no families to support (editorial director Joanna Underwood is soon to assume codirectorship with Miss Tepper). The total budget last year was less than \$70,000. Those who are paid receive \$50 to \$100 a week; the rest are a fluctuating population of volunteers, including students, lawyers, securities analysts, ecologists, engineers, editors, and writers. Those people who have jobs elsewhere spend a lot of time on the telephone for CEP; several others have given up lucrative jobs to devote themselves to the group's work.

Reports and Studies

This work includes, in addition to the major studies, monthly "Economic Priorities Report," orderly summaries filled with data on corporate activities in selected fields. Of the four reports produced so far, one chronicles both the challenges launched against company policies in several 1970 shareholder meetings and the current state of lawsuits on sex discrimination and pollution. Another outlines the social roles of American automobile companies in South Africa; two others detail the pollution policies of the petroleum and airline industries.

Subscriptions to the reports and studies are sold to institutional and corporate subscribers for \$350 a year; some 800 individual subscribers pay \$25 for the monthly reports. The 60 or so big subscribers include a high proportion of universities, religious groups, and foundations. But a cross section of subscribers reveals wide-ranging interest in the service—on the list are the National Council of Churches, the Sierra Club, Boston University, Antioch College, the First National City Bank and Bankers Trust Co. of New York, Ralph Nader, the Syntex Corp., and the Industrial Unions Department of AFL-CIO.

"The corporate responsibility syndrome is hitting pretty hard," says Jeanne Mattison, who constitutes CEP's public relations arm. The high cost of corporate subscriptions has so far been the group's major fund-raising source. However, says Mrs. Mattison, several foundations are poised to deliver aid, if and when the Internal Revenue Service acts favorably on CEP's application for tax-exempt status.

Meanwhile the council, which hopes

to set up a third office in San Francisco, is furiously at work. Ideas for research projects generally originate within the staff. "We decide what we can do the best job on," says Alice Tepper. In the case of the paper industry, preliminary investigation suggested that companies were lagging, despite the fact that technology was available to clean up 95 percent of the pollution.

Eight Month's Work

The entire paper industry report was the result of 8 months' work by three women, with occasional help from five advisers. They devoted the first couple of months to educating themselves on all aspects of pulp pollution and technology. They then formulated a questionnaire for soliciting information about each mill's overall expenditures and annual production; the state of its primary, secondary, and tertiary water treatment equipment; the steps it had taken to combat odors and air pollution; and its conformance to antipollution regulations. These were sent, along with covering letters explaining what CEP was, to each of the 131 mills and 24 parent companies.

Questionnaires were also sent to the appropriate agency in each of the 27 states in which the mills are located in order to find out whether the mills obeyed state laws and the status of any legal proceedings against them.

The impact of the mills on their neighbors was also calculated by asking local conservation groups questions, the gist of which was, "Can you hang your washing outdoors?" and "Does your town stink?"

Of the 131 questionnaires sent to mills, only one or two were returned. Undaunted, the researchers followed up with a barrage of telephone calls, and the information gradually began to roll in. Financial limitations prevented the team from visiting every company, but, says Miss Underwood, who directed the study, personal interviews were conducted with officers and directors of more than half of the 24 parent companies. The investigators also made on-site visits to five or six of the mills.

The response of paper companies to CEP's investigators ranged from a wall of silence to enthusiastic cooperation. The trade press, too, reflected ambivalence on how to handle attempted encroachments on traditional areas of company privacy. A *Chem 26 Pulp and Paper Processing* editorial urged companies to open their doors: "it [CEP] is going to get the information

anyway . . . let's talk to these people and let them know what we are doing. Silence, in this case, is our worst enemy." But *Paper Trade Journal* came out with a hard-line editorial that was tinged with sexism. It charged that the investigation was given "attention in the news media out of all proportion to the importance of this handful of girl graduates aided by a few men." It referred disdainfully to "well-intentioned ladies" who "presume to understand the complexities" of pulp manufacture.

The women noticed a significant unbending of management as their work progressed, and in the end only a handful of companies remained uncooperative. To ensure that their report wouldn't be blown apart because of factual errors, the council sent data gathered from each mill to its parent company's technical director for signed verification. All statistics appearing in the report were thus approved. The entire report was then gone over, word by word, by legal counsel Thomas Asher, environmental specialist Hazel Henderson, and Barry Commoner.

"Paper Profits," released in the prestigious setting of a meeting of the New York Society of Research Analysts, has been praised by some members of the industry and scoffed at by others. The report contains some omissions (which several companies, uncooperative during the investigation, have since been hastening to fill), but its factual basis has, as yet, gone unchallenged.

The American Paper Institute (API) criticized the report for its "narrowness of vision." It objected that the council had not taken into account the industry's past efforts, the financial complexity of the problem, the time required to modernize old pulp mills, and other industry contributions to environmental protection. The API also claimed that the industry's planned antipollution expenditures were quite in accord with the figure of \$750 million recommended by CEP. The council promptly responded that API's figure included money for maintenance and for research and development within the entire industry, while the council was only talking about capital outlay for the 24 companies.

A spokesman for Diamond International, which got low marks in the report for cooperation as well as for pollution control, said the investigators had "twisted things around" and had not taken the trouble to get the facts. He added that the company would issue

NEWS IN BRIEF

● **UNITED STATES OPEN TO SCIENCE EXCHANGES:** Secretary of State William P. Rogers has told a panel of the House Committee on Science and Astronautics that the Administration is willing to exchange unclassified scientific information with any country "regardless of the state of our diplomatic relations with that country." This was the Administration's first public announcement of the consistent policy on international scientific information exchange which was formulated in mid-1969. The Secretary later said his remarks particularly pertained to Red China, with whom there have been virtually no scientific exchanges since the onset of the Cultural Revolution in 1965. However, Rogers' aides said his statements did not presage any new overtures to Peking.

● **SCIENCE ADVISERS:** President Nixon has named five new members to the President's Science Advisory Committee (PSAC), a group of prominent men from public and private life who meet regularly to offer advice on technical matters. They are Lee A. DuBridge, who was Nixon's full-time science adviser until last fall; Herbert Friedman, chief scientist of the E. O. Hulbert Center for Space Research at the U.S. Naval Research Laboratory; Daniel P. Moynihan, professor at the Harvard Graduate School of Education and former Presidential counsellor; Kenneth Harry Olsen, president of Digital Equipment Corp. in Maynard, Massachusetts; and John G. Truxal, vice president of Brooklyn Polytechnic Institute. The terms run through 1974.

● **ROCKEFELLER FUND DRIVE:** Rockefeller University, which is devoted to research and graduate education in the sciences, has embarked on a \$118-million fund-raising campaign for a long-range development program. The university's president Frederick Seitz says that the funds are needed to strengthen existing programs, extend innovative multidisciplinary investigations, start new postdoctoral programs, and construct facilities. The university, which has no large body of alumni and no tuition income, expects most of the new money to come from foundations and corporations. The fund drive is the first in the history of the university, which was founded in 1901 by John D. Rockefeller.

no rebuttal "because it would be de-meaning on our part."

St. Regis Paper Co., which was accused in the report of serious foot dragging, announced soon before the report's release that it was doubling its planned expenditures for environmental protection and was closing two of its foulest mills. CEP does not gloat over this apparent success—it merely expresses pleasure that St. Regis is trying to do better. A St. Regis spokesman, while on the best of terms with the investigators, predicted that the impact of the report would be "zilch," and said "I don't think they're technically qualified to do it—they just don't understand" the complexities.

Favorable reactions came from the financial community. John Westergard, president of Equity Research Associates in New York, called the report "a serious work representing a major contribution to an understanding" of paper's pollution problems. "For the first time, security analysts will have at their fingertips the information and documentation necessary to make a fair determination" of the industry's needs in this area.

Economist Roger Murray said, "'Paper Profits' is an excellent example of precisely what is required" for portfolio managers who are more frequently taking environmental matters into account when they make decisions. Aldrich of Chase Manhattan said the report would be valuable to spur companies to make their own, more detailed investigations into their problems.

CEP is more interested in getting its information around than in chalking up victories. And right now, says board member Thomas Alder, "the promise of the form is more important than the substance of the reports." Nevertheless, Miss Tepper claims that most of the information contained in the intensive studies has never before been made available to the public. In addition, she says, the council serves as a translator of technical material which, if publicized in its original form, would be incomprehensible to the inquiring investor.

As what Alder calls "a literary resource for activists," CEP supplies factual data to enable people, such as the victims of pulp mill pollution, to ask hard questions of companies whom they believe to be violating public interest. On a more organized scale, the council's antipersonnel contracting report was used as a reference by dis-

rupters at last year's meeting of Honeywell shareholders. At this meeting, shareholders requested the company to curtail some \$250 million worth of contracts for antipersonnel materiel.

Whirlpool and several other companies stopped manufacturing components of antipersonnel systems after the study was released. However, in this case CEP only contributed to existing pressures—Another Mother for Peace, a California group that dabbles in corporate prodding, had been conducting a rabid campaign against Whirlpool. In addition, such companies, whose war products constitute only a tiny percentage of their total output, are often subjected to compelling pressures from within to drop a controversial, and not particularly profitable, line.

Attitudes Change

As the CEP staff refines its techniques and as its name becomes better known, company managements are increasingly communicative. Since the publication of the pulp and paper report, "we have been finding a change of heart in a number of industries" involved in the current study of corporations, says Miss Underwood. Chemical companies were reluctant to talk, but now "chemical companies are calling back." Steel companies are a "relatively silent group," she says; but she is confident that the researchers will be able to develop a more effective approach.

The strength of CEP, says Timothy Collins, whose securities firm is donating space for the New York office, is that it is "built on a strong foundation of research" and is interested in "long-term continuity" rather than short-range campaigns. No study is over once it is completed—the council plans to issue follow-up reports on every major investigation. Future reports are already in the works: a study of Southeast Asia war contractors, a detailed look into minority employment practices in the communications media, and a survey of antipollution activities within the electric utilities industry.

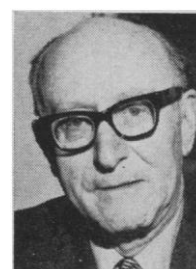
The council is too young for its influence to be assessed, but a growing list of subscribers is apparently satisfied that a team of "girl graduates" and their male aides are capable of mastering financial and technical complexities that industry has long maintained to be beyond the grasp of the outsider.

—CONSTANCE HOLDEN

APPOINTMENTS



J. R. Silber



C. I. Schottland

John R. Silber, dean, College of Arts and Sciences, University of Texas, Austin, to president, Boston University. . . . **Charles I. Schottland**, former dean, Social Welfare Graduate School, Brandeis University, to president of the university. . . . **Paul E. Gray**, professor of electrical engineering, M.I.T., to dean, School of Engineering, M.I.T. . . . **George T. Reynolds**, director, Elementary Particles Laboratory, Princeton University, to director, new Center for Environmental Studies at Princeton. . . . **Allen F. Strehler**, associate professor of mathematics, Carnegie-Mellon University, to dean of graduate studies at the university. . . . **Christopher P. Sword**, professor of microbiology, University of Kansas, to chairman of life sciences, Indiana State University. . . . **Noel R. Rose**, professor of microbiology and assistant professor of medicine, Center for Immunology, State University of New York, Buffalo, to director of the center. . . . **John P. Long**, acting head, pharmacology department, University of Iowa College of Medicine, to head of the department. . . . **Richard F. Armstrong**, associate professor of sociology, Knox College, to chairman, anthropology and sociology, Eastern Kentucky University. . . . **Peter Bedrosian**, assistant professor of psychology, State University of New York, Buffalo, to chairman, psychology department, East Stroudsburg State College. . . . **Simon Horenstein**, associate professor of neurology, Case Western Reserve University, to chief of neurology, St. Louis University. . . . **Richard A. Kenyon**, associate dean, Graduate School, and chairman, mechanical engineering department, Clarkson College, to chairman of mechanical engineering, Rochester Institute of Technology. . . . **Ralph A. Llewellyn**, chairman, physics department, Rose Polytechnic Institute, to chairman, physics department, Indiana State University.