

Almanac

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Turn It Off! Energy Program Attempts to Minimize Costs

When Horace Bomar, director of the new office of energy management, talks about the energy the University hopes to save over the next decade, he's talking, he warned, about "cost avoidance, not savings."

It's a difficult concept for many to grasp. "People assume that if we're not spending the money for utility costs, it's there to spend on something else," he said. "That's not so."

Cost avoidance means the University is trying to shave as much as possible off what are—and will continue to be—exorbitantly high fuel costs. Like the days of the horse and buggy, the days of cheap fuel are gone.

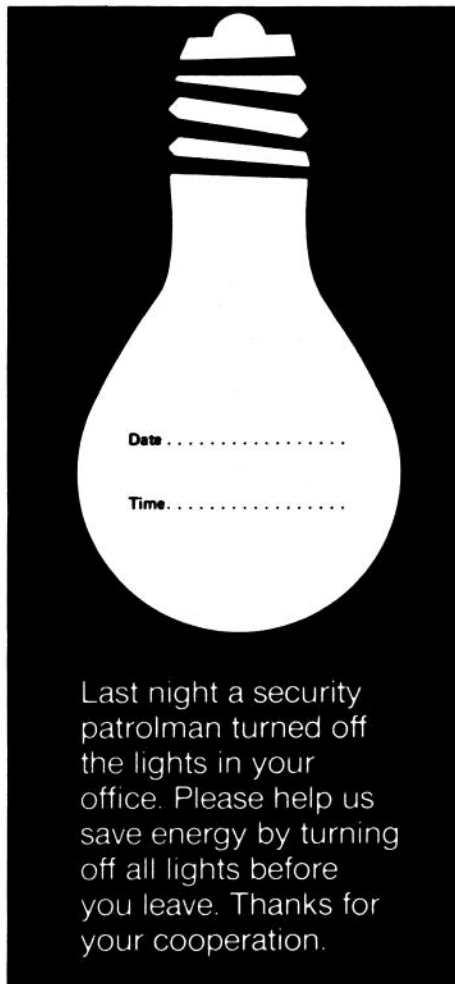
The high cost of energy is clearly one of the larger problems facing the University in the 1980s. What steps can be taken to cut consumption? What sacrifices will people be asked to make? How much of a hardship will they be? These are some of the questions university administrators are examining.

How exorbitantly high are energy costs? Consider the figures. The University's bottom line energy costs—which include all University buildings except the Hospital, the Wistar Institute and several small pass-through accounts—totalled nearly \$3.5 million in 1972-73, the year before the Arab oil embargo. For fiscal year '78-'79, that total skyrocketed to \$7,668,000 and it's projected to jump to more than \$10 million in the current fiscal year, a 35 percent increase over last year. For fiscal year '80-'81, utility costs are projected at \$13,378,000, a 29.4 percent increase over fiscal year '79-'80, and a whopping 74.5 percent increase over fiscal year '78-'79.

"A few years ago, energy was practically free," observed Vice Provost for Research Louis A. Girifalco. "Today it's a major portion of our budget."

That "major portion of our budget" is devoted to the University's two primary sources of energy—steam and electricity—both of which are purchased from the Philadelphia Electric Company (PECO). Steam is used for heating while electricity takes care of lighting and air conditioning. Gas and oil use are "minimal" according to Bomar, with gas utilized primarily for research facilities, and in some dormitories.

With an active energy conservation program in effect since 1973, Pennsylvania may be in better shape than other large



universities. The Office of Operational Services credits that program with avoiding \$8.3 million in utility costs since 1973.

"We were one of the first universities to have an energy office attacking the problem," Bomar said. "In terms of savings, we're up there with the best."

With the rate of increase in utility costs sharper each year, the effort to conserve seems a never-ending battle against lights left burning, wasteful air conditioning and too-high thermostats. Yet current conservation measures may have to become more drastic. Of the estimated \$10 million worth of steam and electricity the University will use this

year, Bomar believes as much as 20 percent is "preventable waste."

That's the acknowledged goal: reduction of the University's energy consumption by roughly 20 percent. And two groups of people are working towards that goal: Bomar's energy management office and Girifalco's academic energy management committee.

The office of energy management handles the technical side of the question. Among their responsibilities:

- information-gathering on energy consumption across the University;
- maintenance of the energy calendar, a year-round timetable indicating when specific conservation measures are to be effected;
- monitoring and maintenance of individual building utility systems and the entire utility system;
- education of the University community on conservation measures;
- development of energy policies.

Bomar explained how they've examined individual buildings to improve energy efficiency, citing Vance Hall as one such project.

Built in the late 1960s when fuel was still inexpensive, Vance Hall was not designed with energy efficiency in mind, Bomar said, adding that two-thirds of the glass is on the north side—the coldest and least sunny side—of the building.

"Vance Hall was looked at by outside engineers specifically to reduce energy costs," Bomar said. "We spent \$200,000 which yielded a 40 percent reduction in energy consumption, but we didn't touch the architecture of the building."

Instead, they redesigned part of the building's mechanical systems, tying the building into a central monitoring system

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Inside

• A report from the National Commission on Research examines the federal accountability demands and research universities, page 2.

• Afro-American conference looks at the prospects of the black middle class, page 3.

National Commission on Research: Restore Quality of Accountability

The National Commission on Research, a non-profit organization devoted to the study and improvement of relations between research universities and government agencies, released its first report in mid-March on *Accountability: Restoring the Quality of the Partnership*.

Written in part by Professor Donald Langenberg, physics, the report suggests that the federal Office of Management and

Budget overhaul its cost principles (Circular A-21) within three to five years, that a "standard deduction" be allowed for indirect costs in a research contract, and that grant sponsors be allowed to comment during audit of their grants.

As "an evolution toward improvement," the Commission also recommends that a new and independent forum be instituted for at least five years to provide a non-

adversarial setting for the improvement of the government-university relationship.

The Commission was founded in 1978 by a number of associations concerned with the quality of research in higher education, including the American Council on Education and the National Academy of Sciences. The report is the first of a series that also will study peer review and other selection processes, alternative funding mechanisms, industry-university-government relationships and the development of research personnel.

Carl Kaysen, vice chairman and director for research of the Sloan Commission on Government and Higher Education and a University trustee, is also a member of the Commission, although he did not serve on the subcommittee authoring this first report.

The Commission does not argue with the idea of accountability. "The issue is how that accountability is to be rendered," the report states. While government-university relations have deteriorated because of differences about accountability for research contracts, the report concludes that "the quality of the relationship must be restored on the basis of mutually understood and agreed-upon principles and objectives."

The detail and volume of government
(continued on page 5)

Director of Communications Named

Mary Perot Nichols, a well-known broadcast executive, communications specialist and former investigative columnist and reporter, was named director of communications last week.

Nichols currently is director of WNYC, AM, FM and TV in New York and former director of communications in the cabinet of Boston Mayor Kevin H. White.

"Mary Nichols is an extraordinary person who brings to her new post a deep set of cultural interests and wide administrative and executive experience. She has capabilities in the print and electronic media which will make her extremely valuable in both the internal and external aspects of the position," Meyerson said. The appointment is effective July 1.

Nichols, 53, was an investigative columnist for the Boston *Herald American*; a freelance journalist specializing in housing and urban affairs and former city editor, political columnist and feature writer for the

Village Voice.

She was director of public relations for the New York City Parks, Recreation and Cultural Affairs Administration during the early terms of Mayor John V. Lindsay and was also associated with the American Friends Service Committee, working with displaced persons.

She had been an editorial assistant at *Time* and an editor of children's books at Artists and Writers Guild.

Nichols also had served as a member of Manhattan Borough President's Community Planning Board No. 2; director of the Women's City Club of New York; director, the Parks Council of New York; director, Fine Arts Federation of New York and as a member of the advisory board of the *Livable City*, a publication of the Municipal Arts Society.

She is a native of York, Pa. and a graduate of Swarthmore College with a major in political science.

Speaking Out

Editor: I feel compelled to correct a misstatement appearing on the first page of the *Almanac* of 27 March 1980. The statement in question reads:

"... Before 1958, government-sponsored grants were not audited, and checks were sometimes delivered directly to the principal investigator rather than to the institution supporting his work...."

May I assure you that government contracts and grants have always been subject to audit both by the cognizant audit agency and by the General Accounting Office. To the best of my knowledge the only grants ever paid directly to individuals were to the chairman of study sections and they were subject to audit in any event. That practice probably was discontinued about 1958.

I speak as one who served as Assistant

Comptroller for War Contracts during World War II and who spent much time establishing the Office of Sponsored Research which later became the Office of Project Research and Grants (of which I served as director) which ultimately became the Office of Research Administration.

It was also my good fortune to serve as a member of the National Committee which created the original A-21 as an improvement over the then operative "Mills Formula" and "Blue Book." I take no credit for any degeneration since.

I would appreciate your making note of this information in a future issue of the *Almanac*.

Donald S. Murray

Professor of Statistics and South Asia Regional Studies and Acting Coordinator of International Programs

Almanac

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Speakers Define Prospects and Problems of New Black Middle Class

Speeches by author Toni Morrison and political columnist Carl Rowan highlighted a two-day symposium on *New Black Middle Class Prospects* last week at the University. Sponsored by the Afro-American Studies Program, the sixth annual conference sparked a lively discussion between speakers and audience.

The conference explored the class, cultural, occupational, political and attitudinal dimensions of the growing black middle class.

Morrison, known for her haunting novels *Song of Solomon* and *Sula*, pondered the question "What ever became of the race people?" Race people were those individuals in the black community whose prestige, wisdom, social involvement and more secure financial position made them respected within black circles and apparent leaders to the outside world.

"They were the people poor blacks sought out," she said. Because of their obligations to the whole of black life and the restrictions racism placed on them, the race people did not betray the rest of their group.

"Black morality was the axis upon which those actions turned," Morrison said of the efforts the race people made. Their commitment was to the group, rather than to individuals.

Unfortunately, the work of the race people has been appropriated by large agencies, Morrison said. The agencies' orientation is toward the individual rather than toward the group, she said and so "for the first time, the possibility for class conflict" among black people exists.

Morrison lamented the apparent passing of the race people. "If their rarity becomes extinction, the result will be tragic."

Rowan took a more current and political tack than Morrison, urging the audience to fully exploit its opportunities of access to "the circle of gossip" to advance black interests.

"I'm delighted that somebody decided to give a conference on the black middle class," Rowan said, explaining that blacks have a tendency to "put down" upwardly mobile members of their group as "sell-outs" to white society.

Rowan labeled this attitude a "great form of self-hatred," noting that a powerful black middle class does make difference in all of black society.

"A minority in this country makes little progress without the support of the leadership," Rowan said. He thought that blacks could gain this support through cautious political maneuvering. He recommended black politicians not endorse any candidate "until you see the blacks in his eyes." Rowan has yet to endorse a presidential candidate.



Charles V. Nichols



G. Franklin Edwards

Rowan also recommended that blacks become more attuned to the power of the media. He suggested that progress could be made with the press not only with the advancement of black journalists, but also through a recognition of the reading black public's economic power. When blacks subscribe to newspapers, he said "blacks have a right to expect something from those papers."

Most importantly, Rowan stressed, black voices must be articulate. The best thing a student could do is "fall in love with your English teacher." He dismissed arguments about the racial bias of standard American English by pointing out that black leadership historically has been a remarkably articulate group.

Other speakers discussed general aspects of the group, while several centered on specific prospects or dilemmas confronting the new black middle class.

L. Bart Landry, associate professor of sociology and Afro-American studies at the University of Maryland explained the economic dimensions of the "new" black middle class. Landry used data compiled from 600 black and 600 white two-parent families living in 21 American cities in 1976 to demonstrate the viability of the new black middle class when compared to the white middle class.

While at first glance the families compared favorably, Landry pointed out that black families had to work harder to achieve an income similar to that of their white economic peers. When the income provided by wives was removed from the analysis, white families averaged about \$5,000 more per year than the black families. Even when educational differences were controlled, black men still seemed to be short-changed on pay day.

When the women in the families were questioned about their motivation for working, Landry continued, most black women indicated that they worked because their families needed the money, while many white women gave other reasons.

Differences in wealth between the racial groupings also emerged from Landry's data. While home ownership was higher among the black middle class, the economic value of black homes was on the average less than that of white homes. In 1976, the average black home in the study was valued at \$31,000, while the average white home was worth \$45,000.

Landry concluded that the class structure has expanded within the black population but that blacks still lack a true capitalist class. He said that black enterprise "pales in comparison" to America's multinationals.

G. Franklin Edwards, professor of sociology at Howard University, expanded on Landry's points by explaining the increasing range of jobs blacks occupy as the black middle class grows. Edwards associated the rise of the black middle class not only with the opening of American society through civil rights legislation but also with increases in the number of white collar occupations in the labor market.

Within this expanded white collar sector, Edwards pointed to shifts among blacks in professional choices. Before 1960, the majority of black professionals were found either in the ministry or education. Now the range of choices available have reduced this skewedness to a plurality of black professionals.

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Worth Noting

• Asked by a magazine to write his own epitaph, W.C. Field supposedly responded with "I'd rather be living in Philadelphia." While that observation never made his gravestone, gravestones and cemeteries in Philadelphia will be the subject of a non-credit course offered through the College of General Studies this summer.

Legacies of the Past: Old Cemeteries Around Philadelphia, set for June 5, 12 and 19, will include three cemetery tours moderated by John F. Marion, Philadelphia author and an expert on cemetery lore.

Among the cemeteries to be explored are St. Peter's, Old Pine Presbyterian Church, Mikveh Israel and Christ Church.

For registration information call CGS at Ext. 7326.

• Danilo Dolci, internationally renowned pacifist and social activist who has been nominated for the Nobel Peace Prize, will speak on *Nonviolence in Today's World*, at 4:30 p.m. today in Room 200, College Hall.

Dolci, who is currently on a five-week lecture of the U.S., is regarded as the world's

foremost living pacifist. For almost 30 years, he and a group of collaborators operating in western Sicily have spearheaded a campaign to find peaceful solutions to economic and social problems which can be applied to all areas of the world.

• Islamic influences in the Middle East and the rest of the world will be explored in a symposium on *Inside the Muslim Middle East: Heritage and Change*, Saturday April 19. University faculty members will examine the Middle East from their respective perspectives in the fields of religion, education, politics, history, architecture, sociology, law and economics. The program concludes with a luncheon in the Upper Egyptian Gallery of the University Museum and a keynote address on Afghanistan by Provost Vartan Gregorian. To register, call Tobe Amsterdam, assistant dean in FAS, at Ext. 7320.

• Nutrition Update 1980, the School of Medicine's fourth annual nutrition symposium, is slated for April 9-11 at the school. It will provide practicing physicians, pharma-

cists, nurses, clinical nutritionists and hospital administrators with a physiologically-based clinical approach to common diagnostic and therapeutic problems in clinical nutrition. For more information call Nancy Wink, program coordinator, at Ext. 8006.

• In connection with the Picasso retrospective opening May 22 at the Museum of Modern Art in New York, the College of General Studies is offering a non-credit course on Pablo Picasso in June. The program features a three-lecture series by University faculty and scholars and a trip to the Museum of Modern Art. Lectures are set for June 3, 10 and 17, with the one-day New York trip slated for Tuesday June 24. For registration information call the College of General Studies at Ext. 7326.

• The Arts College House, located in High Rise East, will present a visual and performing arts festival, April 7-12. The series will include art work by students and music, theater and dance. For more information call Ext. 5258, 382-8473 or 382-4649.

On Campus

April 3-April 11

3, Thursday

Lecture: The South Asia program features Kenneth Bryant of the University of British Columbia on *Strategies of Communication in Vaisnava Poetry* at 11 a.m. in Classroom 2, University Museum.

The Department of Materials Science and Engineering and the LRSM sponsor a lecture on *Recent Developments in the Powder Metallurgy of Structural Materials* by Dr. J. E. Smugersky of the Sandia Laboratories, in Livermore, California at 4 p.m. in Room 105 of the LRSM Building.

The Ancient History Graduate Group presents Dr. Mario Levi on *Sidelights on Alexander* at 4:30 p.m. in the Harrison-Smith-Penniman Room of Houston Hall.

Morse Peckham of the English department at the University of South Carolina will lead a colloquium on *Meta-Criticism as a Behavioral Science*.

Treasures Under Your Feet will be the topic at the Morris Arboretum at 7 p.m.

Theatre: Intuitions, a new student theatre group devoted to the experimental presents Firesign Theatre's *Nick Danger, Third Eye* through Saturday in Bennett Hall. Gene Alper directs; set design is by local artist Steven Lowy. For ticket information call Alper, at 382-7295.

Love Letters on Blue Paper continues through April 6 at the Annenberg Studio Theatre. For times and ticket information, call Ext. 6791.

5, Saturday

Continuing Education: The School of Medicine continuing education series explores *Commonly Encountered Skin Problems by the Primary Care Physician*. Call Ext. 2544 for more information.

Meeting: The Pennsylvania Folklore Society will conduct its annual meeting in Houston Hall beginning at 8:45 a.m. Panel discussions, square dancing, and wine and cheese can be had for \$6; call Ext. 7352 for more information.

7, Monday

Lectures: Professor George Gavalas, California Insti-

tute of Technology, will speak on *Pore Diffusion in Char Gasification and Combustion* in Alumni Hall, Towne Building, 3:30 p.m.

The Annenberg School hosts Lynda Glennon of the Rutgers sociology department on *Blue Collar, White Collar—Social Class and the Family in American Television* at 4 p.m. in the Annenberg School colloquium room.

The Administrative Assembly Brown Bag Seminars hosts trustee Robert Trescher on *Personal View of Trustees' Role* in the Harrison-Smith-Penniman Room of Houston Hall at 1 p.m.

The Undergraduate Psychology Society presents Professor Ann Beuf, sociology, on *Women and Madness* in Room B-21 of Stiteler Hall at 4:30 p.m.

8, Tuesday

Lecture: The Faculty Tea Club presents *Chinese Cooking—a Demonstration* by Betty Foo at 1:30 p.m. in the Faculty Club.

9, Wednesday

Concert: The University Wind Ensemble will present a free concert in Room 200, College Hall at 8 p.m. Call Ext. 8719 for more information.

Council Meeting: The University Council will meet in the Council Room, Furness Building, 4-6 p.m.

Lectures: The Morris Arboretum Laura L. Barnes Lecture features Dr. Peter Ashton, director of the Arnold Arboretum of Harvard University on *The Relationship Between Forest Dynamics and Soils in the Humid Tropics*, at 8 p.m. in the Woodmere Art Gallery in Chestnut Hill.

The Graduate School of Education presents Barbara Kirshenblatt-Gimblet, folklore, on *Riddle and Proverb as Pivotal Forms* at 7 p.m. in Stiteler Hall B21.

The University Museum hosts Dr. Rosalie David, department of Egyptology, Manchester University Museum, England, on *Mummification: The Path to Eternity* at 5:45 p.m. in Rainey Auditorium. Admission is \$3.

Movies: Exploratory Cinema presents Bartlett's *Heavy Metal* and Makavejev's *Innocence Unprotected* at 7 and 9:30 p.m. in the Studio Theatre. Tickets are \$2 general public, \$1 students.

10, Thursday

Blood Drive: The University Hospital will seek blood donations at High Rise North from 1-7 p.m.

Movies: International Cinema brings the Czechoslovakian film *End of August at the Hotel Ozone* to the International House at 7:30 p.m., followed by the Polish feature *Everything for Sale* at 9:30 p.m. Admission to each movie is \$2.

11, Friday

Concert: The University Choir performs in Tabernacle Church, 3700 Chestnut at 8:30 p.m. Free.

Conference: The Women's Studies Program will sponsor a day-long conference on *Roots and Realities: Changing Images of Women in Family and Community*, in the Rainey Auditorium of the Museum. Call Ext. 8740 for more information.

Movies: International Cinema repeats *Everything for Sale* and *End of August at the Hotel Ozone* at 4 and 9:30 p.m. Deborah Shaffer's *The Wobblies* will be shown at 7:30 p.m. with a discussion with the director following the screening.

Continuing Exhibits

Sir Peter Sheppard: Collected Works in the Faculty Club Lobby, Monday through Friday, 9 a.m.-9 p.m.

The Shadow Catcher: E.S. Curtis in the University Museum, Tuesday through Saturday, 10 a.m.-5 p.m., Sunday 1 p.m.-5 p.m.

Urban Encounters at the Institute of Contemporary Art in the Fine Arts Building, Monday, Wednesday-Friday, 10 a.m.-5 p.m., Tuesday, 10 a.m.-7:30 p.m., weekends 12-5 p.m.

Henri Labrousse, 1801-1875, in the Graduate School of Fine Arts, 4th floor space, Monday-Friday, 9:30 a.m.-5 p.m., through April 25. The show commemorates the 100th anniversary of the architect's death.

House Arts opens on April 7 at 6:30 p.m. in High Rise East's Dance Gallery in the Upper Lobby. The show runs through April 12; hours are 4-10 p.m.

Ground Works opens April 8 at 7:30 p.m. in the Philomathean Art Gallery in the fourth floor of College Hall. The exhibit continues through April 25; hours are noon-5 p.m., weekdays.

NCR on Accountability

(continued from page 2)

requirements should be reduced, while, for their part, universities must strengthen their financial self-regulation.

The Commission also found that a revised body of regulations which would provide "fully acceptable accountability and preservation of the research environment" were needed. Moreover, it contends that the management tools now available cannot adequately contend with the accountability problems inherent in a research situation.

The report makes several recommendations covering three areas of concern. The first encourages both government and universities to overcome mutual suspicions.

The second suggests adjusting accountability requirements to the nature of the research activity. Among the specific recommendations are development of a minimum core of requirements applicable to all research agreements, revision of Circular A-21 within three to five years to encourage sound management, accommodate the academic environment, and to be "consistent with the nature of the research process."

Additionally, the report recommends that sponsors should have an opportunity to remark on initial audit findings for their projects. Moreover, the agency program officers should supplement the review of the project final reports with commentary on the viability of the personnel costs for that project. This commentary would link the technical review and financial audit of a research effort.

Effort reporting should be made simpler by "responsible self regulation" in which the testimony of the investigator about the fairness of the salary costs to the grant is coupled with the federal program officer's review of the costs.

The report suggested further that a "standard deduction" for indirect costs, similar to that used in computing income taxes, be devised as an option for the calculation of overhead costs. Moreover, the report advised universities to clean house themselves by reviewing their own research management programs to insure the most effective use of federal research dollars.

The final set of recommendations discuss

means to "increase flexibility and maintain accountability." The accountability processes should increase the incentives for investigators to manage funds "in a scientifically prudent manner," the report said.

Universities should be delegated more of the budgeting and management choices than they now have. Congress should authorize agencies to develop arrangements under which research projects can be grouped together for administrative purposes. Unnecessary constraints on the timing of expenses should be eliminated.

Finally, the report recommends that accountability measures themselves must be tested against the principles of accountability. That is, they must yield results which justify their costs.

A summary of the report was published in the March 14 issue of *Science*. Copies of the report may be obtained from the National Commission on Research, Suite 1003, 2600 Virginia Avenue, N.W., Washington, D.C. 20037. Single copies are free.

—S.J.S.

New Black Middle Class

(continued from page 2)

Martin Kilson, professor of government at Harvard, discussed the emergence of a new black political class of elected officials. Because of racism and its restrictions on black participation in the electoral process before the 1960s, the black political class' limited "number and character did not permit description," Kilson said.

While some outstanding black individuals were involved in government as "clientage politicians" before the 1960s, Kilson noted, these people were "too weak to be considered a viable political class." A clientage politician was a politician linked as an individual to powerful whites who could negotiate for blacks, he said.

The civil rights victories of the 1960s have opened the electoral process for blacks, Kilson said, and have created a new class with generally common characteristics. Most of new black politicians—75 percent—are from "stable working class or upper blue collar" black families.

This closeness allows the leaders to "understand those still beneath," he said, and so the new class is still "responsive to these still on a lower level. We would have to be naive to think this attentiveness will persist indefinitely," Kilson warned.

Loretta Williams, assistant professor of sociology at the University of Missouri, questioned the ramifications of affirmative action on the new black middle class.

Williams suggested that the rising group

has over-invested its future in the success of the affirmative action programs. She said that some view the black middle class as a "managed" class created primarily because of these programs.

Because of the diffusion of affirmative action to a wide spectrum of groups including Aleuts and white women, Williams wondered if it had a "built-in tension" caused by the competition for jobs between these groups.

The greatest set of problems stemming from affirmative action programs were perceptual, Williams said. For some, she said, "the implication... is that racial minorities can not make it on their own and need white male assistance."

Cora Bagley Marrett, professor of sociology and Afro-American studies at the University of Wisconsin related the problems of one group of aspiring black capitalists—the building contractors and the trade associations formed to combat these problems.

Black contractors have formed trade associations, Marrett said, both for educational and protective purposes. Many contractors enter the field with knowledge of construction methods alone and lack the business acumen to manage payrolls or other business aspects of a firm. Trade associations work with government programs to provide this technical knowhow.

Marrett pointed out, though, that problems of minority contractors go beyond

simple inexperience. Black contractors often experience difficulties in receiving adequate financing and bonding. The combination of firms in trade associations offers more leverage to combat these problems with the banking and insurance communities.

Charles Nichols, professor of English at Brown University, spoke on the cultural accomplishments of black artists and the relationship of the black middle class to this "high" culture.

The black artist, he said, "is obligated to his audience... he is part of his community." He compared this involvement to the call-and-response form used traditionally in black churches.

This immersion in the community is coupled with sophisticated level of craftsmanship which has carried the black artist beyond realism and naturalism into a greater subtlety of forms. Ellison, for example, "created a wholly new narrative landscape" in *Invisible Man*.

The black artist has also turned to black history as a source for his art, Nichols said. He noted that over 120 black heritage societies now flourish across the country.

He also said that black artists have also turned inward, creating more psychological works. He hoped that his would not devolve into an abandonment of community.

Each speaker's remarks were discussed by a panel of fellow scholars and questioned by the audience in public discussions at the close of each session.

S.J.S.

Opportunities

The following listings are condensed from the personnel office's bulletin of March 27. Because of the delay occasioned by printing schedules, these listings should not be considered official. Some positions may no longer be available.

Bulletin boards at several campus locations list full job descriptions. New listings are posted every Thursday. Bulletin board locations are: Franklin Building: outside personnel office, Room 130; Towne Building: mezzanine lobby; Veterinary School: first floor, next to directory; Leidy Labs: first floor, outside Room 102; Anatomy-Chemistry Building: near Room 358; Rittenhouse Lab: east staircase, second floor; LRSM: first floor, opposite elevator; Johnson Pavilion: first floor, next to directory; Logan Hall: first floor, near Room 117; Social Work/Caster Building: first floor; Richards Building: first floor, near mailroom; Law School: Room 28, basement; Dietrich Hall: first floor, outside E-108.

For further information, call personnel services, Ext. 7285. The University is an equal opportunity employer. Where qualifications include formal education or training, significant experience in the field may be substituted. The two figures in salary listings show minimum starting salary and maximum starting salary (midpoint). Some positions listed may have strong internal candidates. If you would like to know more about a particular position, please ask at the time of the interview with a personnel counselor or hiring department representative. Openings listed without salaries are those in which salary is yet to be determined.

Administrative/Professional

Accountant I (2694) \$10,375-\$14,375.

Assistant Director (2831).

Assistant Director (02933) supervises operation of large cafeteria; responsible for food ordering, storing, preparation, and serving; maintains equipment, employee scheduling and training, production schedules and forecasting; inventory control (college graduate with degree in institutional or restaurant management; 5 years supervisory experience with some knowledge of union practices and collective bargaining) \$12,900-\$17,850.

Assistant Director Annual Giving II (2870) \$14,850-\$20,550.

Assistant Director of Residential Living (02912) supervises area administrative offices; and assistant area directors; organizes and participates in selection, training, and supervision of residential staff; serves as a resource in all aspects of residence hall programming (M.A.; 2 years residence hall supervisory experience; managerial skills) \$11,250-\$15,850.

Assistant Director, Textbooks (2887)

Assistant to Chairman (02937) academic advising for 3 Fine Arts programs; evaluates transfer credit; maintains records of faculty appointments; administers 5 budgets; monitors expenditures; revises bulletins (experience of studio programs and schools) \$10,375-\$14,375.

Associate Development Officer III (2541) \$18,625-\$26,250.

Associate Director of Athletics (2710) \$21,450-\$30,225.

Business Administrator I (B235) \$10,375-\$14,375.

Career Counselor (2631) \$12,900-\$17,850.

Data Communication Administrator (02930) develops on-line applications using CICS; plans expansion of network; deals with vendors and servicemen; conducts training; interacts with Uni-Coll; interacts with network users; monitors network (college degree or equivalent experience; programming and systems experience; 1 year CICS; background in PLI and COBOL) \$21,450-\$30,225.

Data Production Operations Manager (2894) manages administrative data including data entry, production control, data control, and high speed remote operation COM center and optical scanning; negotiate contracts with vendors of computer supplies, hardware and software services (business degree; 5 years operations management of midsize IBM data center; ability to deal with vendors of DP services; ability to perform hardware and software evaluations; ability to do hardware planning) \$16,125-\$22,725.

Deputy Director (02651)

Director (02923) \$28,325-\$39,950.

Director of Admissions and Financial Aid (2798) \$16,125-\$22,725.

Director of Fiscal Operations \$14,850-\$20,550.

Director of Upperclass Admissions (2752) \$12,900-\$17,850.

Editor (2905) \$16,125-\$22,725.

Education Coordinator I \$10,375-\$14,375.

Executive Assistant for Development and University Relations (27772) \$24,650-\$34,750. No longer accepting applications.

Financial Analyst (2824) \$14,850-\$20,550.

Foreman, Repair and Utility (2689) \$12,900-\$17,850.

Heating/Ventilating Instrumentation Control Foreman (2790) \$12,900-\$17,850.

Junior Research Specialist (3 positions) \$10,375-\$14,375.

Junior Research Specialist (B0285) processes micro fluid samples for electron microprobe analysis in a micro analytical renal laboratory; prepares solutions; and assists with general laboratory duties (3 years of college or graduation from medical technician course; experience in a clinical chemistry laboratory) \$10,375-\$14,375.

Librarian I (2767) \$11,250-\$15,850.

Manager of Operations (02949) maintains Wharton Computer Center facilities; supervises and schedules operations staff; manages data storage media; supervises administrative applications programming; assists users with operations problems (some experience in computer operations; DEC-10 experience desirable; college degree preferred) \$10,375-\$14,375.

Production Manager, Dining Service (02932) responsible for ordering, receiving, preparation accountability, and sanitation of food products and related materials; maintains quality control, food and production schedules (college degree and/or five years experience in food service operations, health and safety standards) \$12,900-\$17,850.

Programmer Analyst II (2 positions) \$14,850-\$20,550.

Project Manager (2433) \$16,125-\$22,725.

Project Manager (2 positions) executes and controls research projects; participates in development areas and new sponsor development; works on refining managerial processes and produces 4 or more working papers per year (fluency in Spanish; advance degree in fields related to project research; 3 years experience in business, research, or consulting) \$16,125-\$22,725.

Regional Director of Admissions (2592) \$14,850-\$20,550. No longer accepting applications.

Research Coordinator (B267) \$12,900-\$17,850.

Research Specialist (B261) \$11,250-\$15,850.

Research Specialist I (2 positions) (B0271) responsible for chemical syntheses and microorganism biosyntheses of nucleotide analogs, biochemical muscle protein preparation, synthesis of novel photolabile compounds and the application of novel photochemical approaches to biological Problems (B.S.; several years laboratory research; experience in chemical and biochemical techniques) (B0296) under supervision of senior staff; conducts research; assumes supervisory role in some projects (SOSYS Ph.D. student; completion of basic requirements; 1 year of high quality work as research assistant; ability to assume lead role in project research) \$11,250-\$15,850.

Research Specialist II (B0286) professional level work in cell fractionation techniques, enzymatic assays, small animal surgery, handling radioisotopes; teaches and supervises technical staff; prepares reports and manuscripts (five years direct professional experience; ability to supervise laboratory personnel) \$12,900-\$17,850.

Research Specialist III (2 positions) \$14,850-\$20,550.

Research Specialist IV (B0223) \$18,625-\$26,250.

Senior Systems Analyst \$16,125-\$22,725.

Superintendent of Construction and Repairs (2690) \$14,850-\$20,550.

Supervisor, Mechanical Systems (2791) \$14,100-\$17,850.

Part-Time Positions in Administrative/Professional

Permanent Employee (B0290) sets up appointments with subjects; conducts interviews in subjects' homes; attendance at 1½ day training session required (experience in interviewing; must have car; must live in New Jersey) Hourly wages.

Temporary Extra-Person (B0288) simulates patients with specified nutritional disorders in interview setting

for health professionals; give feedback on interviewing skills and group process skills to interviewers (experience in counseling/interviewing/group process; acting experience preferred) Hourly wages.

Support Staff

Accounts Payable Clerk (2902) processes invoices; calculates discounts; prepares monthly statements; will be trained in usage of computer terminal for encumbrance accounting (high school graduate; background in accounting; accurate typing) \$7,425-\$9,450.

Administrative Assistant (B259) \$7,975-\$10,150.

Administrative Assistant (2952) supervises day-to-day operations; explains and interprets policies and procedures; solicits and evaluates student employment opportunities; determines job classification and wage rates; handles correspondence; typing (college degree preferred; 1 year experience in University placement/employment setting; verbal and written skills) \$7,975-\$10,150.

Administrative Assistant I (2 positions) \$7,975-\$10,150.

Administrative Assistant I (3 positions) (B280) day-to-day management of research center; delegates assignments; handles correspondence (supervisory experience; accurate typing; knowledge of University procedures); (2942) explains and interprets policies and procedures; evaluates student employment opportunities; handles correspondence; determines job classification (degree preferred; 1 year university placement or employment setting experience; written and verbal skills); (2655) handles correspondence; processes applications; interprets policies and procedures; arranges interviews; types budgets, manuscripts, and travel reimbursements (high school graduate; 5 years University experience preferred; excellent typing, spelling, and shorthand; experience typing mathematical formulas and equations) \$7,975-\$10,150.

Administrative Assistant II (B253) \$7,975-\$10,150.

Admissions Assistant (2 positions) (2877) \$8,625-\$10,950; (2889) \$7,975-\$10,150.

Assistant to Loss Prevention Specialist (2855) \$6,850-\$8,775.

Bookstore Clerk (2927) \$5,500-\$7,000.

Building Supervisor (2945) oversees, coordinates, and assures delivery of maintenance, utility, housekeeping, mail shipping/receiving and other non-clerical support services in a large laboratory complex February through June (B.S. in engineering or related background; construction/maintenance trade experience).

Clerk III (2880) \$6,875-\$8,750; nine-month position.

Clerk IV (B259) maintains records of investment transaction; reconciles cash balances; prepares portfolio valuations and cash flow projections; maintains investment files (high school graduate; accurate typing; experience in investment clerical work) \$7,425-\$9,450.

Coordinating Assistant (2 positions) \$8,625-\$10,950.

Coordinating Assistant II (B294) assists with planning estimating of research budget, development, maintenance and operation of research grants; processes incoming information for computer programs; prepares reports on information retrieval systems; may train/supervise personnel in use of peripheral devices/information processing techniques; maintains expenditure records; responsible for paying bills/bookkeeping activity; maintains acquisition records and/or leases, maintenance contracts of equipment (familiarity with word processing equipment; B.A. preferred; 2 years experience in business, budget, contract administration) \$10,000-\$12,725.

Electrician I (2794) Union wages.

Electron Microscope Technician II (A913) \$9,650-\$12,225.

Engineer (2854) Union Wages.

Executive Secretary to the Vice President \$10,000-\$12,725.

Food Service Worker (Temporary) (2934) prepares food; shelves supplies; maintains dining area; Union wages.

Herdman I (B90) \$5,500-\$7,025.

Histology Technician (B284) fixation and decalcification of tissue; hard tissue embedding, sectioning and staining; making solutions; ordering supplies; general lab duties (autoradiography; developing x-rays; ASCP registration preferred) \$7,575-\$9,600.

Junior Programmer (B287) responsible for data entry, coding, and compilation of new programs; revises and tests existing computer programs (B.A. with some exposure to data processing concepts and FORTRAN IV) \$6,875-\$8,750.

Gifts to University Announced

Library Clerk (3 positions) Union wages.

MCST Operator (2482) \$7,425-\$9,450.

Medical Receptionist (3 positions) (B287, 2941) schedules appointments; secures additional medical services required by physicians (ability to work under pressure; good interpersonal skills) (B273) greets patients; maintains billing record system; schedules appointments (high school graduate; 2 years dental office experience) \$6,875-\$8,750.

Office Automation Operator (B220) \$7,375-\$9,375.

Project Budget Assistant (B249) \$7,975-\$10,150.

Project Budget Assistant (B276) assists in preparation of grant proposals and budgets; records expenditures; prepares journal and budget entries; maintains records for 8 funds for machine shop (high school graduate; some college accounting courses; aptitude for figures; familiarity with computer printouts) \$7,975-\$10,150.

Receptionist (2 positions) \$5,900-\$7,525.

Records Assistant (2939) maintains course evaluation files, faculty files and off-campus elective files; processes certification and licensure forms for graduates; general office functions (2 years of college; good command of English; ability to organize large bodies of data) \$7,975-\$10,150.

Repairs Expeditor (2776) \$7,975-\$10,150.

Research Laboratory Technician II (2 positions) \$8,575-\$10,850.

Research Laboratory Technician II (B274) immuno-histochemical staining for cyclic nucleotides and other antigens; prepares antisera from rabbits; biochemical assays for cyclic tissues samples at low temperatures; uses biochemistry equipment; prepares buffers and reagents solutions (chemical lab experience on a collegiate level) \$8,575-\$10,850.

Research Laboratory Technician III (3 positions)

(B285) general virology technician to include tissue culture, animal work, preparation of virus material, serologic studies, immune assays, cell fusion (B.S.) (B0275) performs surgical procedures on laboratory animals; maintains records for long-term projects; prepares chemical and biological reagents; carries out experiments involving the preparation and maintenance of cells in culture (college degree with background in biology and chemistry) (B0272) prepares blood for isolation of human white blood cells; conducts various in vitro measurements of white blood cell reactions to bacterial derived stimuli; analyze bacterial products by various immunoelectrophoretic techniques (experience in hematology; in vitro tissue culture; immunochemistry) \$9,650-\$12,225.

Residence Hall Clerk (2873) \$5,570-\$7,088.

Secretary II (7 positions) \$6,875-\$8,750.

Secretary III (11 positions) \$7,425-\$9,450.

Secretary IV (2901) \$8,625-\$10,950.

Secretary Medical/Technical (8 positions) \$7,975-\$10,150.

Secretary/Technician, Word Processing (2 positions) \$7,975-\$10,150.

Statistical Assistant (2874) \$8,625-\$10,950.

Store Cashier (2928) \$5,900-\$7,525.

Technician Physical Laboratory II (B-0169) \$8,575-\$10,850.

Utility Person (2900) Union wages.

Utility Person (02940) installs and relocates laboratory equipment; performs routine maintenance duties; responsible for security of assigned areas; maintains department directories and signs; sorts and redirects mail (high school graduate; 2 years related experience; able to move actively and lift heavy objects) Union wages.

Ten part-time support staff positions are listed on campus bulletin boards.

HUP Seeks Student Help

The public relations department at HUP is looking for a student to work part-time. Responsibilities include running errands, distributing mail, photocopying material and answering telephones. They're looking for someone to work nine flexible hours each week; the salary is \$3.50 per hour. For information call Rochelle Torrens at the HUP Employment Office, 662-3175.

The University has recently received more than \$3.9 million to support student financial aid, bringing the total gifts for financial aid to \$21,798,000 since the current \$255 million capital campaign began in the fall of 1975.

"As the financial pressure on our students continues, increased support becomes crucial to attracting the most outstanding students to Pennsylvania," explained Provost Vartan Gregorian. "Gifts from alumni and friends release important operating dollars now being used for student aid."

A \$1 million bequest from W. Richison Schofield of Philadelphia will provide scholarship support to undergraduates. Schofield, a 1918 graduate of the School of Electrical Engineering, was vice president and director of Leeds & Northrup Co. His contribution gives the University all-important funds to help students in any school offset the annual tuition, fees and living expenses which average an estimated \$8,600.

Economic pressures on students in the Faculty of Arts and Sciences will be eased with a \$1.2 million trust established by the estate of Mrs. Katherine Kolb Paanakker Guttman. Guttman was the daughter of Colonel Louis John Kolb, an 1888 graduate of the College. Kolb was president of the Kolb Baking Company, of Philadelphia, which later merged with what is known today as the General Host Corporation, producers of Bond Bread.

Students in the Wharton School will benefit from a \$100,000 gift for scholarships from the estate of Esther R. West in memory of her husband, Herman O. West. A 1918 Wharton graduate, West taught accounting at the Wharton School from 1918 to 1933 and was president and chief executive officer

of the West Company, a rubber products firm in Phoenixville.

The University also received a number of gifts for graduate fellowships. The Robert Wood Johnson Foundation has made a three-year grant of \$913,778 to continue its support of the Clinical Scholars program. Under the direction of Dr. Samuel P. Martin III, this program enables physicians who have completed their clinical training in medicine to pursue their education in such non-medical areas as management, sociology, epidemiology and computer science.

The estate of Ethel P. Mallery provided \$205,000 for fellowships in the Law School and the School of Medicine for students from Blair County, Pennsylvania, where the Mallerys lived. The Law Fellowships are to be named in memory of Ethel Mallery's husband, Charles R. Mallery, a 1913 graduate of the Law School.

From the estate of Sara E. Carrow, a bequest of \$175,000 has established the Martha Alice Parkinson Memorial Fund for the training of surgical residents at HUP. Mrs. Carrow, of Philadelphia, was a 1926 graduate of the School of Education.

The Northwestern Mutual Life Insurance Company, of Milwaukee, Wisconsin, has made a gift of \$85,000 to the Program for the Eighties to establish Northwestern Fellowships in Insurance in the Wharton School.

Another bequest of \$50,000 comes from the estate of Marguerite B. Hamer, of Knoxville, Tenn., who received her Ph.D. degree from Penn in 1919. She has provided for fellowships in the history department.

The five-year Program for the Eighties, now in its final year, has reached \$230 million of its \$255 million goal to develop the University's academic strengths selectively.

Textbook Director Resigns



After fifteen years with the University bookstore, Inez DiFabio has begun a new chapter in her life. As of Friday, March 28, DiFabio retired her position as director of the textbooks department and took advantage of her new free time.

DiFabio started working at the bookstore in 1965 as a part-time secretary and was promoted through the ranks until she attained her directorship position. Among her many duties, she was responsible for ordering the textbooks requested by the various departments and professors throughout the University. She considers this contact to be the most rewarding aspect of her job. "I have a great respect for knowledge and I have worked with such brilliant people," she said. "Just talking to them has made my job a pleasure."

The University and the Energy Crunch

(continued from page 1)

that automatically triggers fans, pumps and other systems as needed.

Bomar is also planning a campus-wide energy audit that would identify those buildings and areas of the campus where "we're really wasting." The audit would help establish a laundry list of projects for the rest of the decade.

Girifalco's academic energy management committee pulls together academic and administrative staff to consider far-reaching lifestyle changes that would help reduce energy uses.

That committee includes Dean Donald C. Carroll, Wharton; Dean Robert H. Dyson, Jr., FAS; Dean Arthur E. Humphrey, engineering; Dean Edward J. Stemmler, medicine; Janis I. Somerville, vice provost for university life; James V. Maugeri, director of student data in the registrar's office; Mary-Jo Ambrose, assistant to the vice provost for research; John Ravage, director of publications; Donald J. McAleer, director of physical plant; and Horace Bomar.

Girifalco explained that the committee "will analyze energy use related to the academic and research missions of the University."

With technical data from the energy management office as background, Girifalco's committee will examine all aspects of University life. Among their chief, and most difficult, considerations, will be lifestyle changes: altering academic and class schedules, work hours, facility use and availability.

Because Pennsylvania is an extensive research university, facilities and services can't simply be shut down when the students are not here, as they can be at other colleges and universities, Girifalco said.

"Research goes on 24 hours a day, seven days a week," he said. "We have to make sure that faculty have the time and space to perform those experiments. The University can't give up research because energy costs are high."

Is it possible to separate the teaching and research functions, closing down teaching facilities when classes are not in session, and combining research in facilities that could remain open? Girifalco notes that most buildings are of multiple use, combining teaching and research.

"The University has never separated research and teaching in its philosophy, so it's difficult to separate the two physically," he noted.

The committee will consider, however, the extent to which zoned control can be utilized, shutting down those parts of a building that are not in use while keeping research areas going, he said.

IT
REALLY
IS BETTER
IN THE
DARK!

 Save Energy Now

Other lifestyle changes the committee may examine include a shift from the current two-semester academic calendar to a four-quarter calendar, consolidation of the various schools' academic calendars to provide greater scheduling uniformity, a four-day work week, and fuller use of the University's facilities over the summer months.

Girifalco pointed out that, in fact, the various academic calendars have a greater unity than perhaps many realize, but in making plans to consolidate further, they first would have to analyze how much would be saved by the consolidation and then balance those savings against the academic costs.

Whatever solutions the committee arrives at, "we must first serve the academic needs of the University," Girifalco pointed out. "It's easy enough to come up with a list of things in the abstract, but it's more difficult to adopt programs."

Any energy program must take into account the academic and research missions of the University; Girifalco does not want to see either hindered at the expense of energy efficiency. "In an organization as complex as

the University, we have to look at how we can minimize costs and maximize use without hurting programs," he said.

Despite the concern, Girifalco does not believe changes in University schedules and systems will go unopposed, but he believes opposition is "the price you pay for energy efficiency."

What sort of solutions will the committee arrive at? Which projects will be adopted for energy conservation?

Girifalco believes it all comes down to a question of economics: which projects can be justified as providing a return on investment.

"It depends totally on money," Girifalco explained. "We'll have to show that a project will pay for itself over four or five years. If it can't, that project will be delayed."

Bomar echoed those sentiments, noting that if energy costs continue to rise, projects that once seemed infeasible, may turn out to be reasonable, and even necessary.

Out of all this work on energy conservation, Bomar said he would hope to see the University establish an energy policy. "Every time a decision is made," he said, "the question should be asked: how will this have an impact on utility use?" —C.A.V.

Council Agenda Set

The University Council meets next Wednesday at 4 p.m. in the Council Room of the Furness Building. Among the items on the agenda:

- a report from Vice President for Operational Services Fred Shabel on the energy problem and possible solutions;
- a report by Carol Tracy from the Safety and Security Committee;
- a report by Dean Louise Shoemaker from the Community Relations Committee;
- discussion of the proposed bylaws amendment on graduate-professional student membership on the Council;
- action on proposed resolutions on the University's relationship to the United Way;
- continued discussion on the guidelines and integrated statement of policy on research.

'Danger' in Bennett Hall

Nick Danger, a spoof on the golden age of radio by Firesign Theatre opens tonight in Bennett Hall at 8 p.m. A production of Intuitions, the experimental student company, the show runs through April 5. A late show at 10 p.m. follows the opening, with 7:30 and 9:30 p.m. curtains for the weekend performances. Admission is \$2.