TRUSTEES OK ENERGY PROJECT

The firm of Nack and Sunderland, Los Angeles, has been approved as the project engineers to develop the necessary construction drawings to implement an energy management program on campus. The firm recently completed a campus-wide study of university energy use, and their appointment as project engineers followed from their report.

The project involves replacement of sections of underground steam lines, modification of building mechanical and electrical systems to permit closer monitoring of those systems, and ultimately the integration of on-campus mechanical and electrical operations to a centralized computer control. The programmable computer will insure that each campus building uses energy resources in the most efficient and effective manner.

The Governor's Budget contains an allocation of $30,000 for working drawings in the 1978-79 fiscal year. Construction of the first phase at an estimated cost of $450,000 will probably be funded in the 1979-80 capital outlay budget.

ENERGY ETHICS TALK SUBJECT

Two Cal Poly teachers will present a public program on "The Ethics of Energy" on Thursday (Feb. 9). Rodney Keif (Environmental Engineering) will discuss the physical aspects of the subject and Judy Saltzman (Philosophy) will discuss the ethical considerations beginning at 11 am in University Union 220. Admission will be free. Keif, a registered professional engineer, said he will use slides and overhead projections while discussing the various forms of energy, their different characteristics, and how the technological development of a society is determined by the form of energy it exploits. Dr. Saltzman will discuss how a culture's ethical posture toward various energy forms affects that culture's ethical posture toward various energy forms affects that culture's utilization of those forms, Keif said. The Feb. 9 program will be the tenth of the Arts and Humanities, 1977-78 series at Cal Poly.

AID/UNITED GIVERS DRIVE REPORT

President Robert E. Kennedy has announced that faculty and staff of Cal Poly contributed $29,187.41 to the San Luis Obispo County Youth and Service Agencies during the recently completed AID/ United Givers Fund Drive. The total is $1051.41 or approximately 43% more that the amount contributed by university employees in the previous campaign. He emphasized that Cal Poly givers during the past nine years that the campaign has been conducted on campus have contributed more than $215,000 to this worthwhile charity.

Funds contributed in the campus fund drive are distributed by AID/United Givers to non-profit youth and American Heart Association, American National Red Cross, and Boy Scouts of America. Also receiving funds from the drive are the Camp Fire Girls, Children's Home Society of California, Easter Seal Society, Family Services Center, Functional Living, Inc., Girl Scouts of the U.S.A., Grass Roots II, Mental Health Association, Middlehouse, Muscular Dystrophy Association, National Foundation - Roots II, Mental Health Association, Middlehouse, Muscular Dystrophy Association, National Foundation - March of Dimes, Salvation Army, San Luis Obispo County Hotline, YMCA, as well as other charities specified by the donor.

WHITE/BLACK ART EXHIBIT

"Art For A Time of Reason" is the title of an art exhibit jointly sponsored by the ASI Fine Arts Committee and the Black Students Union. The exhibit will consist of a one-man show of painter Eugene E. White, and will run in the Galerie of the Julian A. Pocphee University Union through Friday (Feb. 10). White has exhibited over 300 times since becoming professional in the late 1960's with galleries in Chicago, New York, Cincinnati, and San Francisco sharing his work. The public is invited to attend the exhibit.
DANCE CONCERT COMING SOON

Accompanied by music of composers as diverse as Louis Armstrong, Bizet, Vivaldi, Alfred Apaka, Offenbach, and Bernstein, Cal Poly will present the annual Orchesis dance concert on Friday and Saturday (Feb. 10-11). To be held at 8 pm both nights in the Cal Poly Theatre, the theme for the concert will be "Dances of the People." Tickets will be $2 for students and $2.50 for public.

Many of the dances on the program will be choreographed by members of Orchesis, an organization of students involved in dance courses and activities of the Physical Education Department. Music by Vivaldi will accompany the first dance in the program, "High Places," which will be followed by the lilting Hawaiian strains of Apaka's "Hukilau" and a dance celebrating the relationship of men to the sea.

Other highlights in the program will include: Armstrong's rousing rendition of the spiritual, "Just a Closer Walk With Thee," a traditional number often played while funerals proceed through New Orleans on the way to the cemetery; Offenbach's "The Can Can" will accompany a dance titled "Ooo La La!," a version of the dance made popular during the late 1800's; Bernstein's "West Side Story" will be used in portions for the dance, "This Side of West Side."

Bizet's music from his most famous opera, "Carmen," will accompany an 18-minute balletic slice from that work; C.Smalls' "Tornado" will accompany a short dance of the same name depicting Dorothy's sweep from the Kansas plains into the Emerald City of Oz; "U'Vau Ha'O Vdlm," by S. Karlilbach will be used with a dance of thanksgiving to conclude the campus concert. Tickets will be on sale at the University Union ticket desk, and at the Cal Poly Theatre box office on the evenings of the performances.

SPACE SOCIOLOGY IS TALK TOPIC

"Are We Spaced Out? The Human Implications of Space Technology" will be the topic for the 1977-78 Arts and Humanities program to be presented on Thursday (Feb. 2). David L. George (Political Science) and Donald E. Morgan (Head, Industrial Engineering) will present the discussion at 11 am in University Union 220. Admission will be free and the public is invited to attend. The program is part of a series on "The Technological Experience" being presented during the Winter Quarter as part of the Arts and Humanities 1977-78 series.

Dr. George is a frequent participant in national conferences on social psychology and political science, a specialist in personal conflict and political decision making, and a reviewer for The Western Political Quarterly. A former member of the faculty at San Diego State University and University of Oregon and post doctoral fellow at Yale University, he is a graduate of San Diego State University and University of Oregon, where he earned his doctor's degree.

Dr. Morgan has been a participant in ordinance research for the U.S. Navy and a consultant in the nation's space colonization program. He is a graduate of Oregon State University and Stanford University, where he completed study for his doctor's degree. Before moving to Cal Poly, he was an engineer for Westinghouse Electric Corporation and manager and partner with the Intermountain Surgical Supply Company.

INSURANCE REP ON CAMPUS

Ron Gifford, representative of Occidental Life of California, will be on campus Wednesday (Feb. 8) from 9:30 am to 11:30 am to answer questions of employees on the Cal-Western/Occidental basic and major medical health insurance sponsored by the Public Employees' Retirement System as well as the California State Employees' Association ordinary and term life insurances. Those interested in talking with him can contact him in Adm. 106. Appointments are not necessary.

BEEF AND PORK AVAILABLE

The students meats enterprise project is selling locker beef with immediate delivery available on some orders. Sides of beef average 300-350 lbs and are currently being sold for $.93 per pound. The cattle are raised and fed on campus then aged for at least two weeks before being cut, wrapped, and frozen. For that special gourmet dinner you may have coming up, the enterprise project also has two 20-25 lb suckling pigs for sale at $50.00 each. Call Norm Eggen at Ext. 2275 for more information and to place your order.

Applications are being accepted for the position of Associate Dean, Curriculum and Instruction, a 12 months' position in Academic Affairs.

Duties include the following: acting for the Vice President for Academic Affairs; analyzing and reviewing existing and new courses and curricula; preparing the university catalog; analyzing and making recommendations on faculty staffing; and working with accreditation groups.

Required qualifications: Master's degree; Associate Professor or Professor with at least two years' experience in university teaching.

Preferred qualifications: Earned doctorate; administrative experience; knowledge of curriculum, academic master planning, budgets, Cal Poly and CSUC rules and procedures; experience in working with groups on academic matters; experience and ability in developing and using computer applications; awareness of current developments and changes in career opportunities and the impact on university curricula.

Submit applications to Dr. Hazel J. Jones, Vice President for Academic Affairs, by February 27, 1978. Appointment will be effective Spring Quarter, 1978, or at mutual convenience. Affirmative Action/Equal Opportunity/Title IX Employer.
PUPPETS WILL RETURN TO POLY

Top notch puppet theater with internationally known master puppeteers will have a nine-week season this July and August in San Luis Obispo. The 40-performance theater season will mark the debut of the California Puppet Theater, established this month by Cal Poly. Managing director of the non-profit enterprise is Michael R. Malkin (Speech Communication) an internationally known authority on puppet theater, and a member of the advisory board for the 1980 international puppet festival to be held in Washington's Kennedy Center.

"The California Puppet Theater will be the first statewide repertory theater devoted to the international art of puppetry," Dr. Malkin said. "Its performances will rank with those of the top puppet theaters of the world. California audiences will be able to see productions by artists who have earned international acclaim for their performances." Cal Poly's decision to establish the California Puppet Theater followed a one-week festival on campus last summer attended by more than 1000 members of the Puppeteers of America. Star performers during the festival included master puppeteers from Germany, France, Canada and Israel.

This summer's nine-week season will be a unique combination of study and performance for a select group of university-level students chosen from applicants across the United States. "Three master puppeteers will present professional performances during the season," Dr. Malkin explained. "They will also teach courses in stagecraft and applied theater. Students will be able to follow theatrical processes from script development to final performance." Tickets for the campus performances will be available at 150 Ticketron outlets across the Western United States.

EDITOR WILL ADDRESS PRESS PROBLEMS

Frank P. McCulloch, former bureau chief for Time-Life and presently managing editor of the Sacramento Bee, will speak to students, faculty and interested persons Friday (Feb. 3) at 11 am in University Union 220. He will speak on the problems and the future of the American press.

McCulloch spent 17 years with Time-Life where he served as bureau chief in Los Angeles, Dallas, Washington D.C., Hong Kong and Saigon and was an editor-writer in New York. Previous experience also included positions with the Woodland Daily Democrat, Reno, Nevada Evening Gazette, Los Angeles Times and for the Associated Press and the United Press. Mr. McCulloch's appearance on campus is being sponsored by the Journalism department.

FIRST WEEKEND/POETRY OF JOY

"Poetry of Joy" will be featured on the First Weekend Program presentation being planned for Sunday (Feb. 5) according to Bernice Loughran (Art) coordinator for the series. The program will begin at 7:30 pm in University Union 220. Admission will be free and the public is invited to attend.

Dr. Loughran pointed out that "the middle of a rainy, winter season seems an appropriate time for focusing on the positive, happier aspects of life. "We hope townspeople, students, and faculty will all come to listen or read their own original poetry." She said a signup sheet, on which amateur and professional poets alike can sign for reading times, will be located near the door.

TOWNSEND PENS STAT TEXT

Neal R. Townsend (Mathematics) is the principal author of a new introductory textbook on statistics. Dr. Townsend wrote the text, Developing Skills in Statistics, with Dr. Grayson H. Wheatley of Purdue University. Published early this month by Allyn and Bacon, Inc., Boston, at $12.95, the book was written for use by high school and community college students.

Dr. Townsend, who believes his book fills a definite need, said the concept for the book developed while he was working on his doctor's degree at Purdue. "I hadn't come into contact with a good introductory statistics book for high schools and recognized a need for one that is easier to read," he added. "A student needs only elementary algebra to understand the concepts in the text." A Cal Poly faculty member since 1965, he also is a graduate of Wisconsin State College and San Diego State University.

NEED FOR INTERVIEWING SPACE

This year's on-campus recruiting for seniors is very active, demonstrating the interest and confidence employers place in Cal Poly's programs. To accommodate the increase in the number of employer representatives visiting our campus, the Placement Center is requesting assistance with regard to identifying suitable interviewing space.

If any member of the faculty, staff, or administration is scheduled to be away from the campus for one or more days during the next six weeks and would be willing to make their office space available for interviewing, please contact the Placement Center. Any offices suitable for holding on-campus interviews will be greatly appreciated during this very busy recruiting season. Pam Summers or Richard Quijano (Placement Office) Ext. 2501, will be happy to answer any questions or take information concerning available space.

BOOKS AT HIGH NOON

The next "Books at High Noon" program will feature Bernice Loughran (Art) reviewing Brain Revolution: The Frontiers of Mind Research by Marilyn Ferguson. The program will be held in the Staff Dining Room at 12 noon on Tuesday (Feb. 7). The book relates in layman's language the unfolding story of neurobiology with topics such as "The Inner Control of Pain." All faculty and staff are invited to attend.

PERS MEMBER ELEEED

The university has been notified by the Secretary of State's Office that on Jan. 13, Bill D. Ellis, a classified school employee of the Desert Sands Unified School District, was reelected to the Board of Administration, Public Employees' Retirement System, filling a position expiring on Jan. 15, 1982.
Constance H. Gray, Biological Sciences, presented a paper, “Thyroxine-Enhanced Sex Differences in the Histology of Iodate Retinopathy,” at the annual meeting of the American Society of Zoologists held in Toronto on December 27-30.

Malcolm McLeod, Biological Sciences, attended the extension course entitled “Appropriate Horticulture for California” at U.C. Davis on November 19-20, 1977. The course concerned landscaping with drought tolerant plants either native or exotic. One of the presentations, “Perpetuating Native Tree Cover: Foothill/Oak Woodlands” was given by V.L. Holland also from the Biological Sciences Department.

David Kell, Malcolm McLeod, Lee Parker, and Dirk Walters, Biological Sciences, attended the first annual symposium sponsored by the Biological Sciences Department Cal State Fullerton on December 10, 1977. It was entitled “Biogeography of Baja, California,” and included speakers from several institutions in California and Baja, California.

Thomas Richards, Raymond Bauer, Leslie Bowker, Richard Pimentel, Michael Moser, Dennis Hynes, Rhonda Riggings-Pimentel, Kurt Kline, and Ochong Okelo, all Biological Sciences, attended the 58th Annual Meeting of the Western Society of Naturalists. It was held at the University of California, Santa Cruz, on December 27-30, 1977. Drs. Richards, Bauer, Pimentel, Moser, and Kline presented papers on their research. Drs. Hynes, Bowker, Bauer, and Richards served as chairmen of symposia or contributed paper sessions. Dr. Montgomery has been secretary of the society for the past 12 years.

James L. Webb, Physical Education was one of four principal speakers at a Runner’s Forum held in Lompoc on Wednesday, Jan. 4. Dr. Webb’s topic was “Nutritional Considerations for the Runner/Jogger.”

Steven Miller, Physical Education, gave a talk titled “Development, Training, and Techniques in Triple Jump,” at two locations of the 1978 National Track and Field Coaches Clinic. One was held Jan. 20, in Anaheim and the other at Palo Alto on Jan. 21.

Walt E. Elliot, Physics, has an article in the December issue of the American Journal of Physics titled “The Career Oriented Pre-technical Physics Project” (COPP). The article reports the successful testing of the new physics curriculum, whose development was funded by USOE.
President Carter submitted his FY 1979 budget to Congress on January 23, 1978. The new budget will support increased research and development in the following areas:

1. **Climate Research** - Eight agencies will undertake a new research initiative in areas such as impact of climate fluctuation on crop production, diagnosing and protecting climate variation. NOAA has been designated as the lead agency for this effort.

2. **Earthquake Research** - Funding will be increased in the National Science Foundation, particularly for better engineering of structures. The Geological Survey will continue prediction research and regional earthquake hazard assessments.

3. **Food and Nutrition** - The U.S. Department of Agriculture will double the funding for its new extramural competitive grant program from $15 million to $30 million. Crop productivity research will focus on photosynthetic efficiency, biological nitrogen fixation, cellular and genetic engineering of plants, and plant protection from pests, drought, and climate.

4. **Energy** - The Department of Energy will continue to develop solar, geothermal, and fossil fuel technologies. Obligations for basic research will grow from $433 million in FY 1978 to $468 million in FY 1979.

5. **Environment** - The Environmental Protection Agency's (EPA's) obligations for research and development activities will increase from $351 million to $358 million. EPA's new budget includes an anticipatory research program to identify potential environmental problems before they arise and to develop new knowledge of fundamental environmental principles.

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The National Science Foundation has announced the establishment of the Directorate for Applied Science and Research Applications (ASRA) effective February 6, 1978. This new Directorate replaces RANN.

Although the name of the new Directorate has changed, the four Divisions mentioned remain: Integrated Basic Research; Applied Research; Intergovernmental Science and Public Technology; and Problem-Focused Research Applications. There is also an Office of the Assistant Director, and an Office of Problem Analysis.

Of particular interest is the Division of Problem-Focused Research Applications which will contain four research programs: Earthquake Hazard Mitigation; Chemical Threats to Man and the Environment; Biological Alternatives for Industrial Feedstocks; and Community Water Management. Dr. Charles Thiel will head the Division. Specific program announcements and funding priorities will be forthcoming from the Directorate.

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**UPCOMING NSF DEADLINES**

3/31/78  U.S./JAPAN COOPERATIVE RESEARCH PROPOSALS. The executive agencies for the U.S./Japan Cooperative Science Program--NSF and the Japan Society for the Promotion of Science--have agreed to institute one annual deadline for receipt of proposals in each activity of the program, beginning in 1978. These new deadlines are as follows: Cooperative Research 3/31; Visiting Scientists 8/31; Seminars 11/1.

NSF and the Japan Society for the Promotion of Science, in the Cooperative
Science program have designated marine biology as a second area of special emphasis. (The first is food productivity.) Summary recommendations from the Joint Advisory Committee which studied research opportunities for U.S. and Japanese cooperation in marine biology are available for interested persons from the U.S./Japan Program, Division of International Programs.

4/1/78 U.S./NEW ZEALAND VISITING SCIENTISTS AND SEMINARS PROPOSALS. NSF can consider proposals from U.S. scientists for cooperative activities with New Zealand scientists in areas other than energy (energy-related activities are coordinated by the Department of Energy's Office of International R&D Programs). New Zealand funds support New Zealand scientists participating in the program. For further information, contact: U.S./New Zealand Agreement for Scientific and Technical Cooperation, Division of International Programs, NSF, Washington, DC, 20550. (202-632-5806)

4/1/78 PUBLIC UNDERSTANDING OF SCIENCE. This program seeks to improve the scope, level, and quality of information about science and technology addressed to the general public, especially with respect to the scientific and technological content of major public issues, and to improve the techniques of distribution and dissemination of information about science and technology to nonscientists. Projects designed to increase public understanding of the consequences and implications of alternative technologies of energy, food production, and oceanic resource development are among several currently important policy issues which will be given high priority this year.

4/3/78 ETHICS AND VALUES IN SCIENCE AND TECHNOLOGY (EVIST). This program is directed toward increasing understanding among the general public and in the scientific and technological communities of three major areas: (1) The ethical problems and conflicts generated by scientific and technological developments; (2) The impact of changing ethical and social standards on the scientific and technological enterprise; (3) The ethical issues and problems which arise in the conduct of science and technology, including those encountered by scientists and engineers in their professional capacities.

6/1/78 ANTARCTIC RESEARCH. This program supports multidisciplinary research on the antarctic continent and in the adjacent oceans. The research is focused to increase scientific knowledge through environmental and resource-related programs.

6/1/78 LATIN AMERICA COOPERATIVE RESEARCH PROPOSALS. These programs are offered to foster and support scientific cooperation on a bilateral basis between the U.S. and several Latin American countries. Under these programs, research-oriented cooperative activities may be conducted and supported in any branch of science, unless specifically limited by mutual agreement between the coordinating agencies. Support is offered for three types of activities: Cooperative research, seminars, and scientific visits.

6/30/78 U.S./FRANCE COOPERATIVE RESEARCH PROPOSALS. The objectives of this program are to promote cooperation between scientists of the two countries for peaceful purposes and to provide additional opportunities for them to exchange ideas, skills, and techniques; to attack problems of particular mutual interest; to work together in unique environments; and to utilize special facilities.