Operations Improvement
Gets New Name, Duties

The group of activities known as "Operations Improvement" has become a new program called "Operations Analysis."

Under the direction of Robert Wilson, the Operations Improvement program has, since 1973, worked towards improving University administrative processes. Through educational programs and individual "action plans," Operations Improvement involved groups of staff members from all parts of the University in activities designed to identify possible areas of improvement, to analyze and define these areas, and to carry them through to completion.

Operations Improvement involved 225 staff members in 17 groups, attending five-day seminars spread over six to eight weeks. The participants took cost-cutting action plans back to their schools and departments, and "saved the University about $750,000 by action plans ranging from minor dollar savings to major improvements," according to Wilson. "For example," he added, "secretaries reorganized their offices and eliminated staff positions in the process."

The new program, Operations Analysis, which became effective July 1, continues the OI objective of improving administrative processes. Under Wilson's direction, Operations Analysis now becomes a primary University resource for assisting and consulting with managers and supervisors on operating and organizational problems. "I will also take up problems that cut across the boundaries between departments or schools," Wilson said.

"This does not mean that people who participated in Operations Improvement shouldn't keep developing action plans to cut costs at the University," Wilson added. "I will also continue to welcome the opportunity to talk over proposed action plans."

Wilson, for example, can help a department which wants to know whether it is being supervised in the right way. "I'll try to help the department get an answer to this question," he said.

Other problems that he might analyze are paperwork systems, utilization of (continued on page 3)

New Phone System To Go Into Effect Oct. 14;
Training Sessions Prepare WU Personnel

Recabling of the campus for WU's new phone system began last spring.

At approximately 6 p.m. on Fri., Oct. 14, WU will switch from one of the oldest types of telephone systems in existence to one of the newest. Although it will only take a few moments for that system—Dimension 2000—to go into operation, it may take WU faculty and staff a bit longer to make the changeover.

Dimension 2000, totally computerized and the most advanced system now being produced by Bell Telephone, guarantees greatly improved phone service for the Hilltop campus. Because of its newness and its many timesaving but unfamiliar features, however, it also guarantees some initial confusion. Alexander Bell himself, confronted with one of the new modular Touch-Tone phones with call-back, waiting and pickup features that all have to be activated by codes—might be tempted to scratch his head and send a telegram.

To help prevent problems, Bell Telephone personnel are conducting hour-long training sessions for University faculty and staff on how to use the system. The sessions began Mon., Sept. 26, and will continue through Fri., Oct. 14, the day of the cut-over to Dimension 2000. Sign-up sheets for the sessions have been distributed and should be returned as soon as possible.

"Dimension 2000 is a very good system, but it won't be completely successful until people learn how to use it," said Robert Reinhardt, the assistant vice chancellor who has been supervising the system's adoption. "All staff and faculty are urged to attend one training session, and those persons who feel they require more instruction are invited to attend two. For problems which occur after the cut-over, Bell personnel will be retained for several weeks," he added.

Included in the 1977-78 edition of Chimes, scheduled to be published Oct. 10, will be instructions on how to use many of the features of the new system, as well as the new number for each phone. Each phone will be a private line which can be dialed direct from on or off the campus. All numbers will be in the 889-5000 and 6000 range and WU operators will be helping people with the new numbers.

The instructions in Chimes, said Tony May, senior service consultant with Bell who has been working on WU's Dimension system for about a year, will reinforce what people learn in the training sessions but will not give the specific (continued on page 2)

Peter H. Zimmerman
David Luecke, vice chancellor for University services, attended one of the early training sessions. All WU personnel are urged to do the same.
David Kovanen, WU junior whose expertise in telecommunications has aided the installation of Dimension 2000, points to part of the Dimension computer system used for processing telephone calls. The equipment is in the basement of North Brookings.

**Improved Service, Economic Advantages and WU Student Bring About Dimension 2000**

WU’s present, outdated and overloaded telephone system, coupled with economic considerations, directly led to the University’s decision to install a completely new phone system. A good part of the decision to adopt Dimension 2000, Bell’s most advanced operating system, must be credited, however, to a WU junior’s making a serious hobby out of the telecommunications field.

Assistant Vice Chancellor Robert Reinhardt said installing a new telephone system made the most economic sense after the University began investigating ways of improving phone service on the Hilltop campus. “As most people on campus know, the present system is inadequate and has been for quite awhile. Sometimes, when people try to call campus, they cannot get through to the switchboard because our trunk lines are overloaded. More often, if they do get through, they have to wait 20 or 30 rings before an operator is free to answer.”

Studies showed, Reinhardt said, that the most expensive way of rectifying this situation would be to expand the present system by adding trunk lines and operators. The least expensive and the most efficient way would be to adopt a new, more modern system. The operating costs of Dimension 2000 are expected to remain approximately the same as those of the present system.

WU will have not only a new, more modern system, but the most modern phone system produced by Bell. The selection of Dimension 2000 can largely be attributed to the efforts of David Kovanen. As a hobby, Kovanen, a junior in electrical engineering, has kept up with legal, technical and other developments in the telecommunications field for the past eight years—which means he’s been at it since the eighth grade.

After meeting Reinhardt in the spring of 1976, Kovanen got involved with the University’s investigation of a new phone system for the campus. His knowledge and contacts within the field led him to discourage the acceptance of the Bell representatives’ suggestion that the University adopt Centrex, a system which has direct inward dialing as does Dimension, but fewer features, and which faces eventual replacement by Dimension or a similar system.

Instead, Kovanen suggested that the University adopt Dimension. Dimension 2000 was so new at the time that the St. Louis Bell representatives knew little about it and were dubious about how well it could handle the heavy load of 1600 to 2000 campus phones. All of the Dimension systems then in existence consisted of 100 to 400 phones.

Since then, Kovanen has continued to work with both the University and the telephone co. to set up the installation of Dimension 2000. He worked with Bell personnel and department heads to decide what feature packages were needed for individual phones. The instructions in *Chimes* and those for the training sessions have also been developed with his help.

Kovanen says he would eventually like to go into telecommunications professionally “because it offers one a chance to deal with all aspects of the field, including the business as well as the technical ends.” His opportunities will no doubt be many for the telephone com-

**Phone System**

(continued from page 1)

knowledge telephone users will need to operate the new system effectively.

The training sessions are particularly important in teaching users to recognize the various tones and beeps used by the system to indicate, among other things, whether a call or other action has been made properly or improperly. A “confirmation tone,” a series of three short beeps, for instance, will assure a caller that an action he has taken has been made correctly. An “error tone,” a series of high-pitched tones resembling the siren of an English police car, tells a caller when he has made a mistake.

Based on the learning experience of other new Dimension customers (WU’s system, with a capacity for 2000 phones, is the largest, but not the first Dimension system to be installed in St. Louis), May expects the most common problems for faculty and staff will be confusing codes needed to activate some of the system’s features. The pickup feature, for instance, enables a person to answer another person’s phone within an office, even though the lines are independent.

To do this, it will be necessary to dial the code star seven (shown on the phone as *7). If a person is already on the phone when he wishes to answer another’s phone, he must first put his own call on hold by briefly depressing the switchhook and then dial star seven.

A similar process is necessary to activate the waiting feature, which means that a person who’s on the phone is notified he has another call by a beep in his receiver (one beep for on campus, or two for a call from off campus, and three for a special call). To answer the second call, he must put his first call on hold and then dial code star nine (*9). After speaking with the second caller, he can then put that person on hold and dial star nine to get back to his first call. If he chooses to leave the second call unanswered, his phone will ring when he hangs up.

Simple actions such as calling out and transferring calls should cause little difficulty. The same procedure is used to call out as with the present system—dialed 9 and the number. Transferring a call requires putting it on hold and then dialing the number it’s to be transferred to.

Other features of Dimension 2000 which will be included on most phones are: callback—when lines are busy, a caller dials a code, hangs up, and his phone will ring automatically when the line is free; conference calls; and callforwarding—the automatic rerouting of calls to another phone. Also, some phones will be restricted from making long-distance calls. The features of individual phones will be known to the person handling each department’s telephone matters.
Actor Dana Andrews, Wife  
To Participate in Workshop  

Veteran actor Dana Andrews, star of stage, film and television, will participate in a two-hour drama workshop, from 10 a.m. to 12 noon, on Sat., Oct. 15, at Edison Theatre. Andrews will be assisted by his wife, Mary Todd, a noted actress in her own right, who has appeared in a number of recent theatrical productions.

The workshop is free to all high school and college students and drama groups, and is being cosponsored by the WU Department of Drama, the St. Louis Area Council on Alcoholism and the Washington University Alcohol Awareness Coalition.

Sidney J. Friedman, chairman of the Performing Arts Area, announced that students in his second semester directing class will present three individual scenes. Mr. and Mrs. Andrews will review each production, after which audience participation will be invited.

Free tickets to the workshop can be obtained by sending a self-addressed, stamped envelope to Mr. Richard Goldberg, National Council on Alcoholism, Suite 206, 7438 Forsyth Blvd., St. Louis, Mo., 63105.

Operations  
(continued from page 1)  

staff time in an office, evaluation of administrative structure and review of procedures for a facility.

Administrators who have projects that might utilize this resource are urged to contact either their administrative officer or Wilson directly at box 1110. The phone number is ext. 5388.

THE CAMPUS Y is once again offering an array of classes and service programs for students this semester. Among the courses, which concentrate on improving the health of both body and mind, are acupressure massage, yoga, assertive training, several cooking courses and programs in weight loss and smoking arrest. Service programs, all voluntary, range from tutoring children of all ages, adults and ex-offenders in basic academic skills, to working with the retarded through a hospital, or serving as a Big Brother or Big Sister to a teenager. For further information, call ext. 4286, or sign up at the Y's offices in Umrath Hall.

The WU Record is published weekly during the academic year by the Information Office. Editor, Janet Kelley; calendar editor, Charlotte Boman. Address communications to Box 1142.

Jessie Ternberg Receives Horatio Alger Award  

Dr. Jessie Ternberg, WU professor of surgery, director of the Division of Pediatric Surgery at St. Louis Children's Hospital and pediatric surgeon-in-chief at Barnes Hospital, was presented with one of thirteen Horatio Alger Awards given this year on Fri., Sept. 16, in Chicago.

The annual awards are given by the Horatio Alger Awards Committee, New York City, to individuals who have achieved success despite modest beginnings. The awards were established 30 years ago by the American Schools and Colleges Association, a guidance and placement service for students of all ages.

Norman Vincent Peale, minister, writer and lecturer, made the presentations to the awardees, who included, in addition to Dr. Ternberg, entertainer Danny Thomas, singer Johnny Cash, and the president of Stretch and Sew, Inc., Ann Person.

Dr. Ternberg, one of the few women in the United States to practice and teach pediatric surgery, is widely respected for her work by both the medical and lay communities. She performs over 500 operations a year on children, many of them to correct gastrointestinal problems in newborns, and has written more than 42 scientific papers.

Dr. Ternberg has received a number of awards, including the U.S. Department of Health, Education and Welfare's International Women's Year Award for Region 7 (Missouri, Iowa, Kansas and Nebraska), 1976; the St. Louis Globe-Democrat's Woman of Achievement Award, 1976; and an honorary doctorate from Grinnell College, where she received an AB in 1946.

Dr. Ternberg, who received an MD from WU in 1953 and joined the teaching staff at the University in 1959, achieved her present position and status by overcoming obstacles. She worked during high school and college at a canning factory and at a shipyard in order to put herself through school since her mother, solely responsible for her family of three children, could not. Although she wanted to enter the WU Medical School on graduating from Grinnell College with a double major in zoology and chemistry, she was unable to do so because of debts she had accrued from college loans. Instead, she accepted a fellowship to study biochemistry at the University of Texas, Austin, which paid her debts. She received a PhD from the University of Texas in 1953, a year after she had entered WU's Medical School. Every summer she returned to Texas to work as a biochemist to pay for her schooling.

When Dr. Ternberg entered Barnes Hospital in 1954 as an assistant resident in surgery, she was the hospital's first woman surgical resident. A staff surgeon, learning of her coming, pounded the chief of surgery's desk, claiming it was a "ghastly mistake."

In 1959, Dr. Ternberg became the first woman surgeon on the WU Medical School staff, and, in 1973, she was the first woman elected head of its faculty council.

OPEN ENROLLMENT for employees into both the Blue Cross/Blue Shield and Medical Care Group health insurance plans is in progress and will continue through Oct. 14. All regular employees on monthly or bi-weekly payrolls may enroll in either program, change programs or transfer from individual to family membership at this time without losing any pre-existing coverage. Cancellation of BC/BS coverage and enrollment in MCG must be completed by Sept. 30, with MCG coverage effective Dec. 1. The deadline for changing from MCG to BC/BS is Oct. 14. The current open enrollment period will probably be the last to be offered by MCG. In addition, rates for both plans will increase at the end of November. For further information, academic personnel on the Hilltop call Jim Erbar and non-academic personnel, Marilyn Rowley, both at ext. 4691. Academic personnel at the Medical School, call Paul Briggs, ext. 2477, and non-academic personnel, Lois England, ext. 2656.

WILLIAM GASS, WU professor of philosophy, recently returned after a month and a half of lectures, seminars and interviews in the Far East, Australia and the Philippines. The tour was sponsored by the U.S. State Department. Among his stops were Melbourne and Sydney, Australia; Manila, the Philippines; Hong Kong; and Osaka, Japan. Some of his lecture topics were "Problems of Form in Fiction," "The Artist and Society," "On Being Blue" and "Gass on Gass."
Calendar
September 30—October 6

FRIDAY, SEPTEMBER 30
4 p.m. Department of Romance Languages Lecture, “The Mix, the Mask, and the Medical Farce: A Study of the Prologues to Rabelais’s Quart Livre,” Alice F. Berry, WU ass't prof. of French. Hurst Lounge, Duncker Hall.


SATURDAY, OCTOBER 1
9 a.m. School of Dental Medicine Continuing Education Course, “Emergencies in Dental Practice,” Dr. John J. Delfino, chairman of the WU Department of Oral Surgery. School of Dental Medicine, 4559 Scott. Call 361-4700, ext. 287 for further information.

MONDAY, OCTOBER 3
4 p.m. Department of Technology and Human Affairs Seminar, “Energy Strategies: The Road Not Taken,” Anony Lovins, British representative of Friends of the Earth. 100 CUPPLES II.

4 p.m. Basic Cancer Research Center Forum, “Cell Adhesion and Chemotaxis in D. discoideum—Molecular Approaches,” William A. Frazier, WU asst. prof. of biological chemistry and neurobiology. Erlanger Auditorium. McDonnell Medical Science Bldg., 4570 McKinley Ave. (Refreshments will be served at 3:30 p.m.)

5 p.m. Five-Day Computing Facilities Seminar, “Statistical Package for the Social Sciences,” Edward Spitznagel, WU prof. of mathematics. 199 CUPPLES I. Call ext. 3137 or 3138 to register.

TUESDAY, OCTOBER 4
8:30 p.m. School of Architecture Slide Lecture, “Recent Buildings in India,” B. V. Doshi, architect, founder and honorary director of the School of Architecture at Ahmedabad, India. Steinberg Auditorium.

WEDNESDAY, OCTOBER 5
11 a.m. Academic Committee Lecture, “Charismatic Figures in History: Jesus, Lenin, Hitler and Elijah Mohammed,” Frederick Koss, chairman of Social Science Division, College of Basic Studies, Boston U. Graham Chapel. Discussion with Koss at 2:30 p.m., Women’s Bldg. Lounge.


7:30 p.m. Center for the Biology of Natural Systems Lecture, “Land Use Reform for a Sustainable Agriculture,” Malcolm Blackie, University College of Agriculture, Lincoln College, Canterbury, New Zealand. 309 Rebstock.

THURSDAY, OCTOBER 6
9:45 a.m. West Central Region of the Association of Collegiate Schools of Architecture (ACSA) Conference, “Anticipating 2000” Keynote Address, George M. McCue, assoc. dean, Graduate School of Design, Harvard University, and principal, MBT Associates, San Francisco, CA. WOHL CENTER.

Registration for conference events $30; $12 for students. Call ext. 4467 or 4504 to register.

FRIDAY, SEPTEMBER 30
7:30 p.m. WU Filmboard Series Double Feature, “The Three Musketeers,” and “The Four Musketeers.” Admission $5. (9:30 p.m.) Brown Hall Theatre.

8 p.m. WU Filmboard Series, “Daughters... Daughters!” Directed by Moshe Misrali. Hebrew with English subtitles. REBSTOCK AUDITORIUM.

SATURDAY, OCTOBER 1
8 p.m. Office of Student Affairs American Cinema Series, “Of Human Bondage” and “All About Eve.” WOHL CENTER. Admission $1.

SUNDAY, OCTOBER 2
2 p.m. Eames Exhibit Film Series, “View from the People Wall,” “The Lick Observatory” and “Boeing: The Leading Edge.” Steinberg Auditorium.

3 p.m. Eames Exhibit Film Series, “The Powers of Ten,” “Textiles and Ornamental Arts of India” and “The Fiberglass Chairs.” Steinberg Auditorium.

TUESDAY, OCTOBER 4
7:30 p.m. WU Filmboard Series Double Feature, “Some Like It Hot” and “Sunset Boulevard” (9:45 p.m.). Brown Hall Theatre. Admission $1.50 for either or both films.

WEDNESDAY, OCTOBER 5
7 p.m. Eames Exhibit Film Series, “View from the People Wall,” “Tops” and “Design Q and A.” Steinberg Auditorium.

8 p.m. Eames Exhibit Film Series, “The Powers of Ten,” “Polyorchis Haplus” and “Toccata for Toy Trains.” Steinberg Auditorium.

THURSDAY, OCTOBER 6
7 and 9:30 p.m. WU Filmboard Series, “The Shop on Main Street.” Brown Hall Theatre. Admission $1.50.

MUSIC
FRIDAY, SEPTEMBER 30
8 p.m. Department of Music Graduate Organ Recital, David Bartlett, soloist. Graham Chapel.

SATURDAY, OCTOBER 1
12:30 p.m. WU Wind Ensemble “Pops” Concert, directed by Dan Presgrave. Northwest Plaza.

8 p.m. Women’s Programming Board, Black Studies Department Concert with Jane Sapp, blues and gospel pianist, composer and folklorist. Graham Chapel. General admission $2; free with WU ID.

SUNDAY, OCTOBER 2
1 p.m. Women’s Programming Board, Black Studies Department Workshop, with Jane Sapp, composer, folklorist, who will discuss theory of music, black music history and folklore. Women’s Bldg. Lounge.

3 p.m. Department of Music Graduate Baroque Trumpet Recital, Steven Plank, soloist. Graham Chapel.

7:30 p.m. Student Union Concert, Frank Zappa, rock musician. WU Quadrangle. General admission $5.50; WU students with SU card, $5. Tickets at the door, $6 for everyone. Tickets available at Edison Theatre Box Office.

EXHIBITIONS
“Connections: The Work of Charles and Ray Eames,” an exhibit, spanning four decades, shown jointly at Steinberg Gallery and at Laumeier Park Gallery at Geyer and Rott Roads. At Steinberg will be six exhibits created by the Eameses. At Laumeier will be the Eameses’ furniture, including the famous molded plywood chair, toys and experimental molded plastic, wood and wire forms. Hours at both galleries are 9 a.m. to 5 p.m., Mon.-Fri., 1-5 p.m. Sat. and Sun. Through Oct. 23.


FILMS

SATURDAY, OCTOBER 1
8 p.m. Office of Student Affairs American Cinema Series, “Of Human Bondage” and “All About Eve.” WOHL CENTER. Admission $1.