Members of the St. Louis County police bomb and arson squad began sorting through ashes and rubble in January Hall late Wednesday night, searching for evidence of the cause of that fire.

**Bomb and arson squad investigates four fires; damage to campus buildings set at $35,000**

Arson has been determined to be the cause of four separate fires reported within a half hour's time on campus late Wednesday night, Oct. 7. The St. Louis County Police Bomb and Arson Squad has begun an investigation. No injuries were reported.

The most extensive damage, estimated at $30,000, was in January 110, a large lecture hall formerly used as a speaker's stage, severely damaged the mock court room, where a fire destroyed furniture was set ablaze, resulting in damage estimated at $5,000, while at McCranie hall a piece of furniture was set ablaze, resulting in damage estimated at $3,000. At McMillan and Prince halls before they reported the call for the January fire. In the McMillan hall basement a piece of furniture was set ablaze, resulting in damage estimated at $5,000, while at Prine, a fire was set in a trash can in a lower level classroom. A small area of carpeting was scorched in the Prine classroom.

Firefighters from Clayton, Ladue, Maplewood, Richmond Heights and University City responded first at 10:52 p.m. to reports of minor fires at Prine, McMillan and Prince halls before they relented the call for the January fire. In the McMillan hall basement a piece of furniture was set ablaze, resulting in damage estimated at $5,000, while at Prine, a fire was set in a trash can in a lower level classroom. A small area of carpeting was scorched in the Prine classroom.

The major blaze in January was under control shortly after midnight. While fighting that blaze, firefighters received word of a fourth fire in a dumpster outside Compton Hall. Clean-up crews began working in January 110 early Thursday morning, and it is expected that those facilities will be reopened in about a week. In the meantime, classes have been relocated. Permanent repairs will be made over semester break.

**Radar pioneer Edward Bowles to speak on patents, skulduggery**

Edward Lindley Bowles, a pioneer in the development and application of radar, will deliver two lectures on campus this week. A key figure in the development of 20th-century electronic technology and its application to the U.S. military effort during World War II and thereafter, he will speak at 4 p.m. Oct. 13 and again at the same time Oct. 14 at informal seminars which all members of the WU community are invited to attend.

Bowles, who earned a BS degree in electrical engineering from WU in 1920 and an MS degree at MIT in 1922, will talk on "Tinkering and Skulduggery: Alexander Graham Bell and the Patenting of the Telephone" Tuesday in room 113, Busch Hall. Wednesday, he will speak on "Latentcy v. Integrity: Early Patents in Electronics" in room 103, Lopata Hall. On this occasion, he will discuss the origins of the Defensiveness ad

Neither university officials nor investigators from the Bomb and Arson Squad have any indication as to who was responsible for setting the blazes. If you have any information about the fires that would be helpful to investigators, call the toll-free arson hotline, 800-39-ARSON, or the St. Louis County Police Bomb and Arson Squad, 889-3318. A reward is offered for those providing information leading to the arrest and conviction of those responsible.

**Homecoming week begins with dance, concert**

Three elements are essential to homecoming at WU:

- Music. Music to march and dance to, cheer with, build floats by.
- Paper. Yards of colored ribbons (myrtle and maroon, mostly) fashioned into floats; pompons; signs in support of the Barrington Bears; paper-mache effigies of their opponents.
- Tradition. Like cheerleaders, pep rallies, the Red Rose Cotillion.

This year's homecoming will lack in none of these elements.

The main event of Homecoming '81, Oct. 17-24, will be the homecoming game at 7 p.m. Saturday, Oct. 22, when the Barrington Bears meet the team from Principia College at Francis Field.

The Red Rose Cotillion, an occasion for dancing, nostalgia and fantasy, will be held in Holmes Lounge at 9 p.m. Saturday, Oct. 17. Live entertainment and refreshments will be provided. Tickets are $3 per couple and may be purchased at the Edison Theatre box office, Oct. 14-16 from 9 a.m. to 1 p.m., or at the door.

On Sunday, Oct. 18, the South-40 swamp will be the scene for a picnic and concert, beginning at 3 p.m. Additional music will be broadcast by KWUR.

Students may vote on Monday and Tuesday to identify the likenesses between photographs of four of the famous WU gargoyles and WU faculty and administrators for the Gargoyle Guild. Voting will take place from 11 a.m. to 2 p.m. at the homecoming information booth in Mallinckrodt.

For anyone whose school spirit has lagged during the week, a noon concert will be given on Thursday by the WU Band in the Quadrangle. The enthronement of the winners for the Gargoyle Ball will be held in Holmes Lounge at 9 p.m. Saturday, Oct. 24, when the Barrington Bears meet the team from Principia College at Francis Field.

**continued on p. 3**
Campus researchers recycle helium to ensure use of vanishing resource

Everyone has seen lighter-than-air helium balloons floating slowly skyward. The balloons eventually come down; the helium doesn't. On a much larger scale, helium is being lost as waste by natural gas companies which extract it along with the fuel they sell. At WU, a new facility has just been completed to conserve helium by recycling it after experiments. The facility, financed by a $127,300 matching grant from the National Science Foundation, is housed in the basement of Crow Hall. It is the first of its kind in Missouri.

"What we are doing here is looking ahead a long way," said project director Kazimierz Luszczynski, WU professor of physics. "We may well reach a point in the next few decades when our helium-rich natural gas reserves are virtually exhausted.

Despite its most familiar association as a balloon propellant, helium is a powerful refrigerant. When cooled into a liquid state, it flushes surrounding materials close to absolute zero, a hypothetical temperature characterized by complete absence of heat. It also exhibits rare properties such as superfluidity, the ability to flow without friction. Luszczynski and Ronald K. Sundborg, professor and co-director of the recycling project, are among several scientists in the WU Department of Physics who are using helium to investigate the nature of matter at low temperatures. They also use helium to cool superconducting magnets, many times stronger than electromagnets.

When a sample of matter interacts with a strong, steady magnetic field, the nuclei of the atoms produce radio frequencies in a range similar to that of a CB or FM radio. Studying these frequencies with a strong, steady magnetic field, the nuclei of the atoms produce radio frequencies in a range similar to that of a CB or FM radio. Studying these frequencies as non-invasive imaging tool for scanning chemical processes in intact organs and in whole animals. Further benefiting was from helium's unique nature are electrical engineers, who fabricate and study microchips at cold temperatures, and medical researchers engaged in quick-freezing biological samples.

Members of the WU Department of Chemistry, too, use superconducting magnets, both in basic research, and as a non-invasive imaging tool for scanning chemical processes in intact organs and in whole animals. Further benefiting was from helium's unique nature are electrical engineers, who fabricate and study microchips at cold temperatures, and medical researchers engaged in quick-freezing biological samples. As the recycling system swings into full operation, at least 90 percent of the gas will be recovered from these kinds of experiments. Pipelines leading into huge, room-size bags collect helium from laboratories in Compton, Crow and McMillen halls. The gas is then compressed, purified and liquefied, at which point it is ready for reuse. According to Luszczynski, the system will be able to recycle a minimum of 20,000 liters of helium per year.

Though the U.S. Bureau of Mines ran a national helium conservation program for a little more than 10 years ending in 1971, recent legislative efforts to reinstate the program have failed. "It's almost certain that helium will play an important role in future technology," Luszczynski said. "The irony may be that just about the time when we are ready to use it of use, it may not be any left. Low temperature research may become limited to places like WU, where a liquefier and recovery system ensure helium's availability."

Bowles continued from p. 1

groundwork, Wildes has written, "which enabled MIT to establish and operate so rapidly and efficiently the MIT Radar School and the MIT Radiation Laboratory, important in the conduct of the Second World War."

During World War II, Bowles became an expert advisor to Secretary of War Henry Stimson, and worked as a problem-solver for him, General George C. Marshall and General H. H. Arnold. He was awarded the Medal of Merit by President Harry S Truman and the distinguished Service Medal. He was appointed honorary commander of the civil division of the Most Excellent Order of the British Empire.

He and his wife, Lois Wuertel Bowles, daughter of the late Edmund H. Wuertel, a former dean of the WU School of Fine Arts, have been generous contributors to this University. Bowles Plaza, named in their honor, features a fountain which creates a gift they made some years ago in memory of their parents. A second gift made under a life-income agreement will establish a medical research fund at WU's School of Medicine in the name of their son Frederick Wuertel Bowles.

Bowles and his wife reside in their suburban home outside Boston.
Berhoff named history chairman

Rowland T. Berhoff, William Eliot Smith Professor of History at WU, has been named acting chairman of the Department of History. He succeeds Robert C. Williams, who was recently named dean of University College.

Other appointments include those of Oscar P. Chulson, professor of biology, who was named acting chairman of the Department of Biology, and Robert L. Canfield, associate professor of anthropology, who was named acting chairman in that department.

Canfield succeeds Robert E. Thach, professor of biology and chairman since 1977; Canfield succeeds G. Edward Merle Kling, former GIE head and provost.

Berhoff has been William Eliot Smith Professor of History since 1975. A member of the WU faculty since 1962, he also served as chairman of the University's history department from 1968 to 1974.

Canfield joined the WU faculty in 1969, earned a BA degree in philosophy in 1952 from the University of Tulsa, a second BA degree in linguistics in 1959 from the University of Michigan and the PhD in anthropology in 1971 from the University of Michigan.

Chulson joined the WU faculty in 1965. He earned a BS in 1953 from Arkansas State Teachers College, an MA in 1960 from the University of Arkansas and the PhD in 1963 from Florida State University.

Shea to head team examining teaching issues

Daniel B. Shea has been chosen to chair a newly formed committee that will examine Undergraduate Teaching, according to Provost Merle Kling.

Kling also is publisher of the Missouri-St. Louis Globe-Democrat, where he earned a BA in journalism. He also has been a sports writer for the St. Louis Dispatch and the Springfield Tribune.

In his charge to the committee, Kling has asked that they comprehensively examine the issues affecting undergraduate teaching, and that they prepare a report on "estimates of general quality of teaching, possible presence of localized problems, adequacy of technological environment (audio-visual aids, for example), adequacy of laboratories and classroom space, unusual problems in recruitment of instructors for some classes, appropriateness of size of classes, techniques of evaluation, etc."

In carrying out its responsibilities the committee will consult with deans, faculty and students in preparation for its reports.

The committee was appointed in response to interest shown by students and trustees in examining the standards for teaching performance. This will be the first time a committee composed of faculty representatives from all undergraduate divisions of the University will examine this issue. Kling pointed out.

Former sports writer to coordinate media

Howard C. Kee has been named sports information coordinator at WU.

Kee will be responsible for a part-time basis for all publicity and media relations for the WU Sports and Recreation Department.

Formerly a sports writer for the St. Louis Globe-Democrat, Kee also has been associated with KMOX radio, KPLR-TV and Prom magazine.

Grants still available

Applications for fullbright teaching awards in Europe for young scholars — recent doctoral recipients or candidates — are being accepted through November 1 at the Office of International Students, Sears International House, room 201. In addition, applications for senior lecturers and researchers may be submitted. For information on all Fulbright opportunities, call Milena Tanaka, at Ext. 3958 weekdays from 9 a.m. to 2:30 p.m.
Saturday, October 17
9 p.m. Red Rose Cotillion. Tickets are $3 per couple. Tickets available at Edison Theatre box office or at the door. Holline Lounge.

Monday, October 19

Tuesday, October 20
4 p.m. Department of Chemistry Seminar, "Structural Studiers by Joint Quantum Mechanical and Experimental Procedures," Lothar Schaefer, dept. of chemistry, U. of Minnesota, U. of Minnesota, 4:30 p.m. coffee hour, 561 Louderman. 311 McMillen Lab.

4 p.m. Department of Technology and Human Af- fairs Seminar, "Solid Oil and the Door," William Lockert, research associate, School of Nutrition, Tufts U. Lipton 104.

Wednesday, October 21
11 a.m. Assembly Series Lecture, "The Role of Law, English Themes and American Aesthetics," Harry W. Jones, Phi Beta Kappa Visiting Scholar and professor emeritus of jurisprudence, Columbia U. 311 McMillen Hall.


7 p.m. School of Fine Art Lecture, "Niagara and Recent Work," Sam Gilliam, WU Visiting Distin- guished Professor of Art. (Opening reception of "Sam Gilliam: Niagara") exhbit in Upper Gallery following lecture.) Steinberg Hall Aud.

Thursday, October 22
11 a.m. Assembly Series Lecture, "Personal Preju- dicies and Stereotypes for Personal and Community Change," Charles King, jr., director, Atlanta Urban Crisis Center, Graduate Colledge. ""Project Hope."" 10 a.m. Interdisciplinary Awareness Community Work- shop with Charles H. King, jr., director, Atlanta Urban Crisis Center. A panel of WU students, fac- ulty and administrators will participate as King demonstrates his approaches and techniques for ex- ploring societal prejudices. Open to all students. Whitney Union Women's Bldg. Lounge.


4 p.m. Department of Chemistry Seminar, "Iron Porphyrins in Unusual Spin and Oxidation States," Harold Gould, dept. of chemistry, U. of Illinois. 311 McMillen Lab. (4:30 p.m. coffee hour. 561 Louderman.)


Friday, October 23

Calendar Deadline is to submit items for the calendar period of Nov. 5-9. Oct. 12 is Oct. 12. Items must be typed and state time, date, place, nature of event, sponsor and admission costs. Also, review of on-campus facilities and services. Examples of items will not be printed. If available, include speaker name and identification and the title of the event. Those submitting items, please note name and telephone number. Address items to Susan Kerling, calendar editor, Box 1142.

Saturday, October 24
2 p.m. Homecoming Day Parade, beginning at Giovani Hall, proceeding to the Delmar loop, and ending in Francis Field. A piece/India parade in the parking lot by the central field and soccer court parking lot will be held at 3:40 p.m. A victory parade will be held in the Campus Mall. MullikinCenter at 10 p.m.

8 p.m. Beaux Arts Costume Ball, sponsored by WU School of Fine Arts. Live and silent auc- tions provided. Couturees should be worn. Open to the public. Tickets are $3 and can be purchased at the door. Bobby Gallery, Bobby Hall. For more information, call Ext. 6500.

Music
Friday, October 16
7 p.m. Edison Theatre Series, "Ragtime '81," with Dick Zimmerman, Jan Whiteman, the Ambrose Saxophone Quartet, Steven Baderke, the Edison Theatre Band. Admission: $6 general admission; $4.50 for area students, WU faculty and staff; $3 for WU students. Tickets available at Edison Theatre box office, 889-6545. (Sat., Oct. 17, with the same performers. On Sun., Oct. 18, 7 p.m.)

Saturday, October 17
8 p.m. Department of Music Graduate Recital, with Jeffery Nossen, guitar; performing a program of 19th-century music for guitar, string and voice. Also performing are Judy Lindsey, Lorrie Oake, Marsha Curtis, Barbara Davidson, strings; and Christine Amorosed, soprano. McMillen Hall CAfe- teria. No charge.

Monday, October 19
8 p.m. Department of Music Guest Artists Recital," "The Dance Wind Trio." George Hussey, dusk, Charles Figel, basoon, and Margaret Simmons, piano; faculty members of the School of Music, Southern Illinois U. at Carbondale, performing works by Boismortier, Bozza, Mozart, Etler and Poulsen. Ann Whitney Olin Women's Bldg. Lounge. No charge.

Performing Arts
Saturday, October 24
7 p.m. Edison Theatre Series, "Court Dance Theatre and Music from Okinawa," featuring an expert group of Okinawan dancers, who will perform traditional dance and music. Works by Boismortier, Bozza, Mozart, Etler and Poulsen. Ann Whitney Olin Women's Bldg. Theatre, 8 p.m.)

Sunday, October 25
9 p.m. Homecoming Float Building Party featur- ing the Street Corner Symphony. WU Tennis team.

Monday, October 26

Wednesday, October 28
9:30 and 9:45 p.m. WU Filmboard Series, "Easy Rider," Brown Hall Aud. $2. (Sat., Oct. 30, same time, Brown.)

Thursday, October 29
7:30 and 9:45 p.m. WU Filmboard Series, "Real Life." Brown Hall Aud. $1. (Sat., Oct. 17, mid- night, Brown.)

Monday, October 19
7:30 and 9:15 p.m. WU Filmboard Series, "A Nous, La Liberte." Brown Hall Aud. $2.

Tuesday, October 20
7:30 and 9:15 p.m. American Express Film Festi- val, "Easy Rider," Brown Hall Aud. $1.75.

Wednesday, October 21

7:45 and 9:45 p.m. WU Filmboard Series, "Sweeps Away." Brown Hall Aud. $2. (Sat., Oct. 24, same time, Brown.)

Friday, October 23
7:30 and 9:45 p.m. WU Filmboard Series, "The Stunt Man." Brown Hall Aud. $2. (Sat., Oct. 24, same time, Brown.)

Monday, October 19
9 p.m. Department of Music Graduate Recital, with Jeffery Nossen, guitar; performing a program of 19th-century music for guitar, string and voice. Also performing are Judy Lindsey, Lorrie Oake, Marsha Curtis, Barbara Davidson, strings; and Christine Amorosed, soprano. McMillen Hall CAfe- teria. No charge.

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Exhibitions
Selections from the Permanent Collection, Lower gallery, WU Gallery of Art, Steinsch Hall. Through Nov. 1, 10 a.m.-3 p.m. weekdays, 1-5 p.m. weekends. No charge.

Sam Gilliam: Niagara." Sam Gilliam, WU Visiting Distinguished Louis D. Beaumont Professor of Art at the fall, will install his monumental construction, "Niagara." Other Gilliam works also will be on display. Sponsored by the Missouri Arts Council and the Missouri Arts Council, WU Gallery of Art, Steinsch Hall. 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. Oct. 18-Nov. 15.

"Reflected Color: Literature and the Arts from the Gent van Goudstik Collection," an exhibition cele- brating the gift of the collection. Special Collec- tion, Old Library, level 2 (Sat., Oct. 30, same time, Brown.)

Wednesday, October 21
6:30 p.m. Women's Volleyball, WU vs. Maryville College. WU Tennis Courts. No charge.

Saturday, October 17
10:30 a.m. Men's and Women's Cross Country In- ternational. Forest Park.

Wednesday, October 21
6 p.m. Women's Volleyball, WU vs. McKendree College. WU Tennis Courts. No charge.

Thursday, October 22
3:45 p.m. Women's Tennis, WU vs. Fontbonne College. WU Tennis Courts.

Friday, October 30
6 p.m. Women's Volleyball, WU vs. Greeneville and Maryville colleges. WU Gym. 7 p.m. Soccer, WU vs. Central Missouri. Francis Field.

Saturday, October 24
10:30 a.m. Women's Tennis, WU vs. Principia College. WU Tennis Courts. No charge.

5 p.m. Football, WU vs. Principia College. Francis Field. Admission $5; WU students free.