A Historic WU telescope helps set the railroads' settling Lone Star state's territorial dispute

As the shimmering summer haze subsides, the crisp fall nights ahead are the best time to visit the WU Observatory. On a clear night, not only the moon and planets are visible, but also the moons of Jupiter, the rings of Saturn, and various fiery stars ranging in hue from bluish-white to reddish-orange.

While the silver-painted dome atop Crow Hall continues to attract up to 1,000 visitors each year from both the campus and the St. Louis community, its presence goes largely unnoticed. But that was not the case a century ago, when the newly established University, then located downtown, provided extensive geodetic and time services.

From a small brick building that housed a $1,500 "superior telescope" at 18th and St. Charles streets, more determinations of longitude were made there than at any other single station in the United States — and perhaps the world.

According to Alexander Langsdorf's history of WU, these longitudes formed the basis of topographical maps produced by the U.S. Geological Survey for a number of years, beginning in 1883. Two of the more prestigious calculations of the observatory fix the longitude of the National Observatory of Mexico and the 100th meridian, which was at that time the boundary line between Texas and the Indian Territory.

The latter finding sparked a long-running dispute in which the State of Texas claimed it was entitled to an additional five-mile-wide, 200-mile-long strip of land. Astronomers found that the old boundary line, determined by observations of the moon, was in fact within 100 feet of the actual meridian as calculated by then modern astronomical and geodetic means.

Though such findings were of great importance to the government, the WU observatory was best known during this period as one of the world's largest time service centers. Railroads across the nation set their train schedules by time signals transmitted from a clock in the observatory over a network of 50,000 miles of telegraph wire. Hundreds of towns in the Mississippi Valley, as well as local jewelers, ultimately relied on these time signals, which were determined nightly by observing when certain stars appeared directly overhead in a northerly line.

Also during this period, the University offered comprehensive instruction in astronomy. According to Langsdorf, several international experts in mathematics and astronomy taught here, including former Chancellor William Chauvenet, who later founded the U.S. Naval Academy, and Henry Pritchett, who became president of the Massachusetts Institute of Technology before heading the Carnegie Foundation for the Advancement of Teaching.

When the University sold its grounds downtown and moved to its present location in 1901, the observatory's revolving dome (minus many of the ball bearings, Langsdorf noted), was reestablished at the spot where Louderman Hall now stands. But city lights and haze and a declining interest in mathematical astronomy gradually lessened its importance, hastened by the fact that Western Union Inc. and the Naval Observatory had begun to provide time signals for the region.

In 1954, the observatory again was moved to the roof of Crow Hall. The original six-inch telescope, manufactured by the H. Fritz Co. and later reground by Alvan Clark and Sons, is still in use. According to Michael Friedlander, WU professor of physics, these companies were the leading suppliers of telescopes for many years. Because of its makers, said Friedlander, the Smithsonian Institution is interested in acquiring the University's telescope should it ever be replaced.

Despite its well-made telescope, the observatory never was a major research facility, Friedlander added. Today it serves mainly to magnify the curiosity of its students. However, he points out, its turn-of-the-century notoriety makes it something of a historical curiosity itself.

Viewing hours are 7:30 to 10 p.m. weekdays. Call 889-OBSV to make certain the observatory is open.

Jurist speaks at annual Black A&S festival

Judge A. Leon Higginbotham, Jr., of the United States Court of Appeals, Third Circuit, will be the keynote speaker for the Black Arts and Sciences Festival Oct. 27-31.

Higginbotham, author of In the Matter of Color: Race and the American Legal Process, will speak on "The Judiciary and Social Change for the Eighties" at 11 a.m. Wednesday, Oct. 27, in Graham Chapel. An open-classroom session from 1:15-2:15 p.m. for the WU community in 102 Brown and a reception for the public at 3 p.m. in Huntz Lounge, Duncker Hall, will follow the lecture.

The theme for this year's festival is "Facets of Black Brilliance," according to Ty Walton, a counselor in Student Educational Services and a member of the Black Arts and Sciences Festival Committee.

"We wanted something that would represent the variety of areas in the arts and sciences in which blacks have been involved," Walton said. "First we thought of facets, then of a diamond and finally of a diamond's brilliance."

Other festival events include a display on the role blacks have played in the history of technology from 10 a.m.-4 p.m. on the third floor of the Women's Bldg. on Thursday, Oct. 28; a multimedia art show by WU students and St. Louis artists from 7 to 9 p.m. in the Mallinkrodt Gallery Friday, Oct. 29, and a musical forum titled "Jazz: The Original Black Music" from 9 p.m.-midnight on Friday, featuring the Tommy Holland/Charles Rose Jazz Quintet.

On Sunday, Oct. 31, selections from the Mae Smith Blooms Collection of black memorabilia will go on display on the third level of Olin Library until Tuesday, Nov. 9. The exhibit, sponsored by the Black Studies Program, consists of dolls, figurines, household items, continued on p. 2
Robert L. Virgil, Jr., dean of the WU School of Business and Public Administration, recently discussed plans for the AIESEC conference Oct. 28 on "The Overseas Chinese Businessman" with (left) Ivy K. Chow, AIESEC projects director and Toni Marie Flynn, president of the group.

The conference will be held in Edison Theatre Oct. 28, in Edison Theatre.

The public may attend for a fee of $30, which includes the luncheon and all materials. Members of the WU community may also attend for $10 for the luncheon. To register, send a check payable to AIESEC-Washington University, campus box 1133.

The program will conclude with a reception at 4:30 p.m. at Stix International House, 6470 Forsyth Blvd.

The Chinese, while capturing the economic identity of most Asian countries, especially the Southeast Asian regions of Malaysia, Singapore, Indonesia, Hong Kong, Taiwan and the Philippines . . . The Chinese, while capturing the economic identity of most Asian countries, have also managed to preserve their cultural identity.

A representative from the International Trade Administration, U.S. Department of Commerce, will be the luncheon speaker at Wohl Center.

The afternoon session will include presentations by Edgar DeVries, professor emeritus of international development, University of Pittsburgh;"The Chinese businessman has been instrumental in developing the economy of most Asian countries, especially the Southeast Asian regions of Malaysia, Singapore, Indonesia, Hong Kong, Taiwan and the Philippines . . . The Chinese, while capturing the economic identity of most Asian countries, have also managed to preserve their cultural identity."

"CYIIIHOCTb" (Essence), a song cycle after poems by Osip Mandelstam, performed by Laurence Dreyfus, viola da gamba, and Nicholas McGegan, harpsichord; and "Canzone," with Maryse Carlin, harpsichord and Seth Carlin, piano.

Harold Blumenfeld, "CYNIIHOCTb" (Essence), a song cycle after poems by Osip Mandelstam, performed by Mary Henderson, soprano, and Seth Carlin, piano; "Für Elise," Ann Faerberg, soloist; and "La Face Cendrée," a cantata after Rimbaud's "Illuminations," Carol Le Goze, soprano, Catherine Lehr, alto, and Seth Carlin, piano.


Schwanner received the Pulitzer Prize in 1979 for his orchestral work, "Aftertones of Infinity." In addition to the Kennedy Center Friedheim Award for "Music of Amber," Schwanner has won numerous composing grants and fellowships from the Guggenheim Foundation and the Martha Baird Rockefeller Foundation, among others.

Schwanner is one of six composers residing with major American orchestras for the next two years in a program directed by "Meet the Composer." He has taught at Eastman School of Music since 1970 and received his education at the Chicago Conservatory and Northwestern University.

**Prize-winning composer featured at annual WU composers' concert**

Pulitzer Prize-winning composer Joseph Schwanner will present the St. Louis premiere performance of his composition, "Music of Amber," Oct. 31 at Sternberg Auditorium.

"Music of Amber" was received first prize of the Kennedy Center Friedheim Awards in 1981. It will join three WU composers who will be introducing original compositions in the University's third annual new music program, sponsored by the Whiraker Charitable Foundation, St. Louis. This year's program will be presented twice on Oct. 31 at 3 p.m. and 8 p.m.

"Music of Amber" will be conducted by Catherine Comet, Exxon Arts Conductor, St. Louis Symphony, and will be performed by Janice Coleman, flute; Robert Coleman, clarinet and bass clarinet; Thomas LeVeck, violin, Catherine Lehr, cello, John Philips, piano; and Richard O'Donnell, percussion.

WU composers and their works are:

*John MacIvor Perkins, "Divisions," performed by Laurence Dreyfus, viola da gamba, and Nicholas McGegan, harpsichord; and "Canzone," with Maryse Carlin, harpsichord and Seth Carlin, piano.*

Harold Blumenfeld, "CYNIIHOCTb" (Essence), a song cycle after poems by Osip Mandelstam, performed by Mary Henderson, soprano, and Seth Carlin, piano; "Für Elise," Ann Faerberg, soloist; and "La Face Cendrée," a cantata after Rimbaud's "Illuminations," Carol Le Goze, soprano, Catherine Lehr, alto, and Seth Carlin, piano.


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Further details can be found in the original article.
Students go behind the scenes on PAA Day

The Performing Arts Area (PAA) will be host to 50 high school students on Oct. 22 during its third annual Performance Art Day.

Geared to introduce promising students in drama and dance to the WU degree programs in those areas, the event is cosponsored by the Office of Administration. Students enrolled in this year's PAA Day were screened and recommended by teachers in their St. Louis area high schools.

PAA Day will expose guests to the performing arts through workshops in improvisation, motivation and technical theatre. Tours of the campus and the PAA studios and stage, as well as attendance at various drama and dance classes, will give participants a sample of student life in the two PAA divisions. A complimentary sandwich supper will be provided for the visitors while they view a slide presentation featuring the dance and music performance by the Mum Company of its original play, *Morningstar*, in addition to musical and lyric selections staged after medieval drama forms, will top off the daytime schedule of events.

Students will also receive complimentary tickets to attend a PAA performance of Eugene O'Neill's *Long Day's Journey Into Night*. Registration for PAA Day is complete.

Saturday seminars offered by MLA program

University College's Master of Liberal Arts Program will again sponsor a Saturday Seminar Series beginning in November as part of its non-credit program in the arts and sciences.

Four faculty members from the Arts and Sciences will give lectures, which are free and open to the public, on "The Idea of Place." The lectures will be held from 11 a.m.-12:30 p.m. in the Ann Whitney Olin Women's Building lounge. No registration is required. A question and answer period will follow.

On Nov. 13, Robert H. Salishbury, Sidney W. Souers Professor of American Government, will speak on "The Politics of Geography in America." Wayne D. Fields, associate professor of English, will speak on "Locating America" on Dec. 4. "Of Dreams, Phantoms and Places: Andrey Bely's *Petersburg*," is the topic of a lecture by Milica Banjanin, associate professor of Russian, on Jan. 29; and on Feb. 12, William H. Marhenen, professor of comparative literature, will speak on "Four Views of Brooklyn Bridge."

Robert C. Williams, dean of University College and professor of history, will moderate the series.

Research on cardiac drug continues with $200,000 grant

The National Heart, Lung and Blood Institute has renewed its grant to the WU School of Medicine for a clinical study of the ability of the drug nifedipine to protect heart muscle during and after cardiac surgery.

The award of some $200,000 will continue the nifedipine research another two years, said principal investigator Richard E. Clark, professor of surgery.

The University received a three-year, $291,000 grant from the institute in 1980 to begin the nation's only study on use of the drug during cardiac surgery.

Current clinical trials, based on more than six years of animal research, include observations of the heart with a nifedipine solution during cardiac surgery. By stopping the heartbeat and protecting heart muscle, the solution allows surgeons to perform coronary bypass operations as well as intracardiac surgery to correct abnormal heart valves and congenital heart defects.

To date, clinical trials with high-risk patients have indicated that nifedipine decreases heart failures and heart damage during cardiac surgery, Clark explained. He said the additional funding will be used to continue clinical trials on adults with severe cardiovascular disease and begin trials on infants with congenital heart defects requiring surgical correction.

Nifedipine is marketed under the trade name Procardia and has been approved by the Federal Drug Administration to treat chest pain.

Increases in claims, health costs force substantial rise in BC/BS rates

Blue Cross-Blue Shield monthly premiums for the WU group will increase substantially effective Dec. 1, 1982. The increase results from two factors: (1) claims by the group exceeded dues paid by the group during the 1980-81 and 1981-82 plan years and (2) health care costs are expected to show further increases next year.

Negotiations with Blue Cross-Blue Shield resulted in a reduction in rates in 1979 by using the claims reserve generated from low group utilization during the previous year. The 1979 group experience was reversed in the two subsequent years. Consequently, Blue Cross-Blue Shield has suffered two consecutive years of losses for the WU group and is therefore raising rates to assure itself that it will not lose more next year.

The 1982-83 premiums are 19 percent and 14 percent below community rates for Blue Cross and Blue Shield respectively. Community rates are those charged to group policyholders with fewer than 100 lives. The WU group insures 3,700 lives currently.

In addition, the combined Blue Cross-Blue Shield and major medical monthly rates for an individual or family are comparable to the monthly rates for the three Comprehensive Health Maintenance Organization plans that are currently offered.

The University increased its contribution to the health care program on July 1 this year by 12 percent, from $40 to $45 a month. Although this rate of increase was greater than rates of increase for salary, it clearly has turned out to be less than the increases for health care costs. As budgets are prepared for next year, careful consideration will be given to the hardship imposed on WU faculty and staff by those high health insurance premiums.

Alternative health insurance plans are available through the University's employee benefits program. Information about these alternatives is available at the Medical Campus and Hilltop Campus. Hilltop faculty and staff may obtain assistance from Bill Mauer and Sylvia Pedroly at 889-5990. Medical School faculty and staff contact persons are Maureen Boyer at 454-2473, and Jane Schindler at 454-2085. Assistance at the Dental School is available through Mary Gonos at 454-0590.

WU space scientists take part in space conference

Robert Walker, McDonnell Professor of Physics at WU, and Raymond E. Arvishon, WU associate professor of earth and planetary sciences, will take part in the morning discussion about "Space and the Nation" during a conference Tuesday, Oct. 26, on "The Use of Outer Space for the Solution of Earth-Bound Problems," sponsored by the United Nations Association of Greater St. Louis, the General Dynamics Corp. and the McDonnell Douglas Corp.

The morning and afternoon sessions will be held at the McDonnell Planetarium in Forest Park.

James M. Beggs, administrator of the National Aeronautics and Space Administration (NASA) and chief American representative to UNISPACE-82, a conference held last August in Vienna, will be the keynote speaker. He will talk on "NASA: Today and Tomorrow" at 9 a.m. Tuesday.

The afternoon session, beginning at 1:30 p.m., will address "Space and the World." In the evening, James A. Van Allen, discoverer of the Van Allen Radiation Belts of the earth, will speak on "Future of Solar System Exploration" following dinner at 6:30 p.m. at the Chase-Park Plaza Hotel.

Costs to attend vary from $10 to $30 depending upon the events attended and the meals included. For further information, call the UN Association at 721-1961.

Karen Sue Kidde entered the Karl Lagerfeld Design Competition last spring as a senior in the fashion design area of the School of Fine Arts, and this summer, she walked off with the $200 first prize. One of the sketches from the portfolio she submitted - a "corp-pono cotton dress with circle skirt," as she described it - is shown above. Lagerfeld is a Russian designer who labels his clothes "by Chloe." Kidde, who earned her BFA from WU in May, is now pursuing her design career in San Francisco.

WU researchers hope to perfect a new method of measuring the body's curves and thickness for radiation therapy in the coming months. In their technique, similar to aerial mapping of land, they shine a pattern or dots of light on the patient. A personal computer linked to a closed circuit tv camera analyzes the distortion in the dots of light on the patient. A personal computer linked to a closed circuit tv camera analyzes the distortion in the dots of light on the patient. A personal computer linked to a closed circuit tv camera analyzes the distortion in the dots of light on the patient. A personal computer linked to a closed circuit tv camera analyzes the distortion in the dots of light on the patient.
Calendrier

Lectures
Thursday, Oct. 21
4 p.m. Neural Sciences Lecture, "Neural Mechanisms of Tactual Form and Tactile Discrimination," Kenneth Johnson, Dept. of Neurosciences, Johns Hopkins U. School of Medicine. G. M. McDonald Medical Sciences Bldg., 4555 McKinley.
4 p.m. Plan Biology Lecture, "Physiological and Molecular Control of White Embryogenesis," Ralph Quimby, Dep. of Botany, Oregon State U. S. 322 Rehberg.
4 p.m. Department of Chemistry Seminar, "The Adsorption of Indian Chemicals," Richard Eisenberg, prof. of chemistry, U. of Rochester. 311 McMullen.
8 p.m. Department of English Colloquium, "Joseph Smith and the Zohar, or How to Amend the Bible," Robert Hodes, WU assoc. prof. of English. Hunt Lounge, Duncker Hall.
Friday, Oct. 22
2:30 p.m. Department of Technology and Human Affairs Colloquium, "The Socioeconomic Effects of Disarmament," Charles Guenther, staff person, St. Louis Chapter, AFSC. McMillen Auditorium, McDonnell Medical Sciences Bldg., 4565 McKinley.
4 p.m. Immunology Research Lecture, "Phytochrome: mRNA and Protein Stability," David Thomas, School of Medicine. 472 McDonnell Medical Sciences Bldg., 4565 McKinley.
4 p.m. Department of Anatomy Colloquium, "The Use of Analogy in Archaeological Inference," Alison Wylie, U. of Chicago. Hurst Lounge, Duncker Hall.
Wednesday, Oct. 27
8 p.m. Women's Volleyball, WU vs. Fontbonne College. Women's Bldg. Lounge.
Saturday, Oct. 23
9 a.m. Neuroscience Lecture, "Memory Loss in Old Age," Leonard Berg, WU prof. of clinical neurology. 528 McDonald Medical Sciences Bldg., 4565 McKinley.
Sunday, Oct. 24
1-4 p.m. Ninth Conference on the Constitution, "Judging the Judges: Are We a Government of the Judiciary?" Senedt Supreme Court Judge Arthur Goldberg, main speaker. Co-sponsored by the WU School of Law and the St. Louis Chapter, American Jewish Congress. Mudall Hall. For more information, call 993-3143.
Monday, Oct. 25
2 p.m. Department of Chemical Engineering Lecture, "Chemically Simulated Locomotion of Bacteriophage Interaction," David Thomas, School of Medicine. 528 McDonald Medical Sciences Bldg., 4565 McKinley.
3:00 p.m. Department of Immunology Research Lecture, "Is There a Critical Period in Immunology?" Charles Guenther, staff person, St. Louis Chapter, AFSC. McMillen Auditorium, McDonnell Medical Sciences Bldg., 4565 McKinley.
3:30 p.m. Seminar in Chemical Engineering, "Formation of Cleavage Planes and Worker Treatment Plans," Enola Proctor, WU assoc. prof. of social work, and Aaron Rottenberg, WU prof. of social work and psychology. Brown Hall Lounge.
4:30 p.m. Department of Electrophysiology Seminar, "Fusing Element Applications in Printed Board and Implant Protectors," Li-Chung Chang, staff engineer, Getoral Technology Div., Endicon, N. Y. 100 Cabbie St.
2:30-3 p.m. CTAH Public Workshop, "Way to Brood Stability," Peter Aranson, anat. and physiological ecologist, Emory U. 300 Elise.
Friday, Oct. 28
4 p.m. Women's Tennis, WU vs. Fontbonne College. Women's Bldg. Lounge.
Saturday, Oct. 29
8 p.m. Edison Theatre Concert, Wieland Kuijken, lutenist, and the English Baroque Strings. Presentation on the history of jazz with musical demonstrations. King McElroy, calendar editor, Box 1142.
5:30 p.m. Women's Tennis, WU vs. Maryville College. Tennis Courts.
8 p.m. PAA Production, "Who's Afraid of Virginia Woolf?" Presentation on the history of jazz with musical demonstrations. King McElroy, calendar editor, Box 1142.
Wednesday, Oct. 30
8 p.m. Women's Tennis, WU vs. Maryville College. Tennis Courts.
8 p.m. PAA Production, "1900." Presentation on the history of jazz with musical demonstrations. King McElroy, calendar editor, Box 1142.
Friday, Oct. 31
11 a.m. Keynote Address, "The Judicary and Social Change for the Eighties," Judge A. Leon Higbee, Jr., U.S. Court of Appeals. Third Circuit. Graham Chapel. (Rehearsal, 1-4 p.m.; Hunt Lounge, Duncker Hall.)
7:30 p.m. Women's Basketball, WU vs. Fontbonne College. Women's Bldg.
7:30 p.m. Women's Wrestling, WU vs. Central Baptist College. Women's Bldg.
8 p.m. Women's Basketball, WU vs. Maryville College. Tennis Courts.
8 p.m. PAA Production, "The Ox-Bow Incident." Presentation on the history of jazz with musical demonstrations. King McElroy, calendar editor, Box 1142.