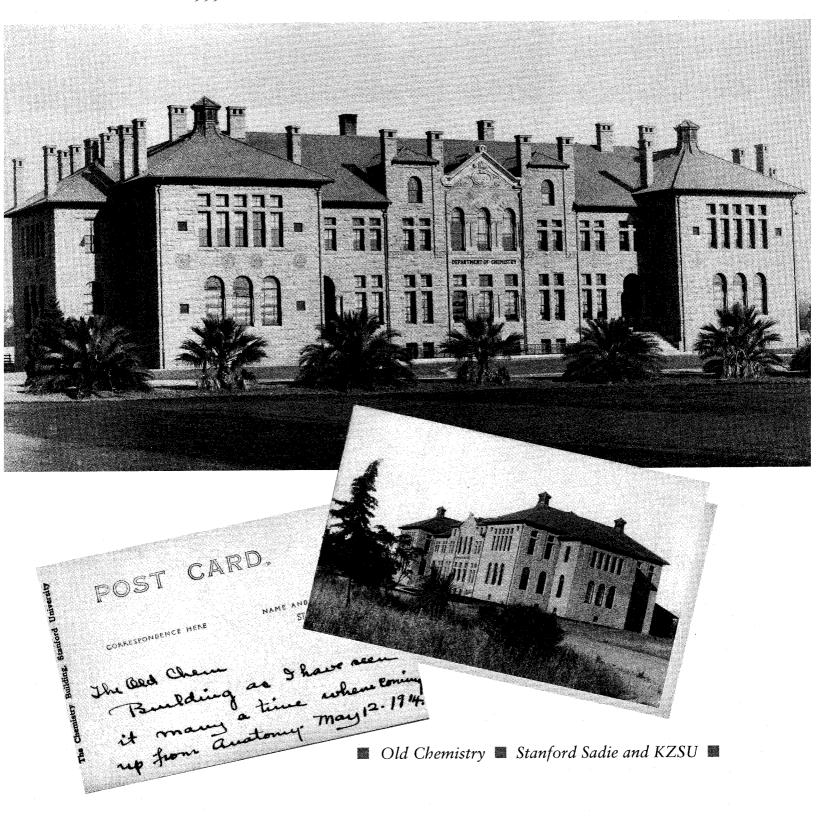
Sandstone & Tile

WINTER 1999

STANFORD HISTORICAL SOCIETY

VOLUME 23 No. 1



WINTER 1999 VOL.23 NO. I

Sandstone & Tile Staff
Patricia White
Guest Editor
Roxanne Nilan Editor
Joanna McClean
Designer

STANFORD HISTORICAL SOCIETY

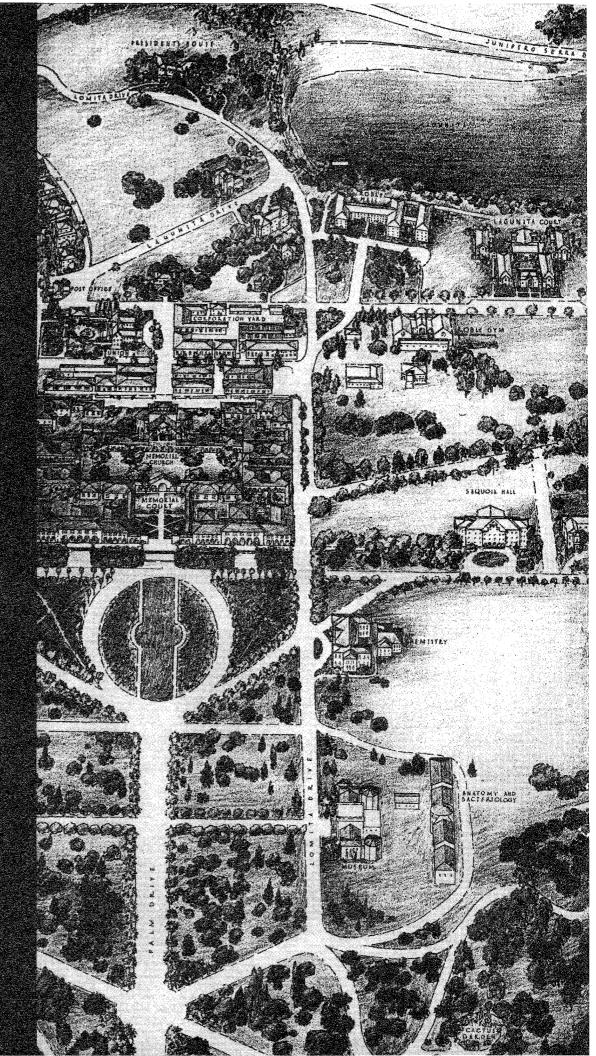
Board of Directors Margaret Kimball, President John Harbaugh, Vice President Alberta Siegel, Secretary Donald Price, Treasurer Robert Augsburger **Bob Beyers** Judith Chan Andrew Doty Bob Hamrdla Albert Hastorf Elsbeth Newfield Frank Riddle Lawrence Ryan Peter Stansky Paul Turner

Membership is open to all who are interested in Stanford history. Annual dues are: Currently registered students, \$10; regular, one person at address, \$20; regular, two persons at same address, \$30; heritage, \$50; distinguished heritage, \$100 to \$1000. Make checks payable to Stanford Historical Society and mail to P.O. Box 2328, Stanford University, Stanford, CA 94309. For further information, contact the Society at the above address or call the office administrator, Carol Miller, at 650-725-3332.

MEMBERSHIP

ON THE COVER:
Photograph and postcards of the
Chemistry Building. Stanford
University Archives.

ON THIS PAGE: Map of Stanford University by Edward M. Farmer, 1934. Stanford University Archives.



Old Chemistry

One of Jane Stanford's Noble Buildings

By Karen Bartholomew & Claude Brinegar

n June 1, 1897, with the dust settling from the long and successful battle over Leland Stanford's estate, Jane Stanford turned to her last great love—the "noble" buildings needed to fulfill her and her husband's conception of Stanford University.

The list she formally delivered that day to the Board of Trustees included five major projects: an assembly hall, a library, a chemical laboratory, the church, and two wings for the museum.

The assembly hall and library—now Buildings 120 and 160 on the Outer Quad—were long ago converted to classrooms. Memorial Church is now seismically braced and beautifully restored, as is the museum.

But what of her high-priority chemical laboratory?

Closed as a structural and fire hazard in 1987, the forlorn fenced-off Old Chemistry Building awaits its uncertain fate. Rumor has it that university officials are considering demolishing it (see separate story).

With strong enrollment, the need for a large chemistry building became apparent soon after the university opened. The department originally was housed in cramped quarters in what is now Building 60, to the immediate right of the vacant site being held for Memorial

Church. Building 60 had a small lecture room, two small teaching laboratories, a research laboratory, and an office. The department expanded to Building 70, but the two buildings still were inadequate.

In addition, university officials surely worried about dangers to neighboring quad buildings from fire and explosion. Indeed, while small laboratory fires are common enough that they rarely warrant news coverage, a fire in December 1895 garnered dramatic headlines in the San Francisco Call, which reported that it made "considerable headway before water could be turned on to any advantage." Two students wrote home about the blaze: Rose Payne reported that although the building was not damaged, the laboratory was burned out and "the loss of apparatus was quite discouraging"; and future Stanford President Ray Lyman Wilbur told his sister that the fire "just missed my desk so my work will not be interfered with." A week later. Jane Stanford wrote to extend "hearty thanks" to the student firemen.¹

Hodges' 1893 chemical laboratory

Construction of a new chemistry building, located off the quad, became a top priority within two years of the university's 1891 opening. In *Stanford University*:

Old Chemistry Building may be demolition target

STANFORD'S OLD CHEMISTRY BUILDING, A 60,000-SQUARE-FOOT SANDSTONE STRUCTURE BUILT NEAR THE OVAL BY JANE STANFORD IN 1900-02, IS THREATENED WITH DEMOLITION. IT HAS BEEN CLOSED SINCE 1987.

For more than a decade, university planners and administrators have been struggling with the issue of how to renovate and reuse the first major science building constructed off the Quad.

They estimate it would cost at least \$35 million to seismically brace the brick walls and sandstone veneer, to bring the building to all other current building codes, and to remodel the inside for academic use.

Various uses have been suggested, including turning it into a regional science library (the building's 16-foot ceilings make that an intriguing possibility), but the cost estimate puts off many academic departments,

continued on page 4

continued from page 3

and there is no consensus on the idea of clustering the science libraries. The chemistry department, which used the building for 85 years, no longer needs it.

The immediate threat stems from the fact that the university is reaching the expansion limit allowed under its general use permit with Santa Clara County. Tearing down a 60,000-square-foot building could enable officials to divert that square footage to new buildings.

According to architectural historian Paul Turner, professor of art history and expert on campus design, Old Chemistry is an important building and should be saved.

"People don't pay much attention to it even though it's part of the university's early architecture because it's separated from the Quad," Turner says. "But that doesn't change its importance historically or architecturally." Turner, a member of the Historical Society Board of Directors, also is chairman of the University Committee on Land and Building Development, which advises the president on physical planning issues. The administration has not discussed its plans for Old Chemistry with UCLBD.

Turner pointed out that Old Chemistry and Encina Hall are the only large buildings constructed under the direction of Leland or Jane Stanford outside the Main Quadrangle in Richardsonian Romanesque style.

Encina Hall, designed by the university's original architects, Shepley, Rutan & Coolidge, was the men's dormitory when the university opened on Oct. 1, 1891 Later, the east and south wings were closed for years, while the central wing was used for administrative offices and the west wing housed the Food Research Institute. Encina underwent extensive renovation in the last several years at a cost of \$27 million for the Institute for International Studies.

Jane Stanford put up her own money 18 months before probate ended on her husband's estate to start work on the Chemistry Building and four other construction projects that were especially important to her (see main story).

University Architect David Neuman shares
Turner's views about the building's historic importance. The massing and character of Old Chemistry
"fit quite well" with both the Quad's Richardsonian
Romanesque style and the classicism of the nearby
museum, Neuman says. Although it is much closer
to the Quad in style, "it is a successful transition be-



Some of the original ironwork is visible in this view of a hallway.

tween divergent architectural styles" in his view; and it "does not try to overpower the Main Quad" in terms of its scale and architectural detail.

After launching construction of the Outer Quad, Memorial Church, and the Chemistry Building, Jane Stanford turned to two other large projects, a gymnasium opposite the museum and, incredibly, a grand new library across the Oval from the Chemistry Building that would replace a library she opened on the Outer Quad in 1900. Both the gymnasium and new library were neoclassical in design, with emphasis on exterior drama and decoration, including a large dome on each. They were out of character and out of scale with the Quad, and because of poor attention to structural details and construction, both collapsed in the 1906 earthquake.

Significantly, although Jane Stanford's Romanesque Chemistry Building does not meet strict modern codes, it was sufficiently well designed to survive two earthquakes, probably because it was constructed more substantially and lacked the ornamental excesses of its neoclassical neighbors.

Most of the building's interior finishes remain intact, but they could be altered to house a contemporary program like many adaptive reuse projects at other campuses.

One Historical Society member says of the potential demolition, "What an interesting time. Most cities are saving old buildings while Stanford wants to take them down." Others compare it to the 1965 removal of what remained of the Stanford family home, near the current Shopping Center.

-Karen Bartholomew

The First Twenty-Five Years, Stanford's first registrar Orrin Leslie Elliott recalled the general expectation that construction of the Outer Quadrangle would begin in summer 1893. "The final decision, however, was that a chemical laboratory was the building most needed and that this should be located outside the quadrangles," Elliott wrote. "Plans were drawn and approved, bids opened, and contracts made ready for Mr. Stanford's signature."

Resident architect Charles E. Hodges designed the structure, but it was never built and his plans no longer exist. However, some of his handwritten contract specifications, dated May 1893, are in the University Archives.² They reveal that he designed a two-story brick building with attic and basement, complete with skylights, 11-foot ceilings, a porch, and wooden rain gutters. He also specified bay windows, and drew a sample in the specifications.

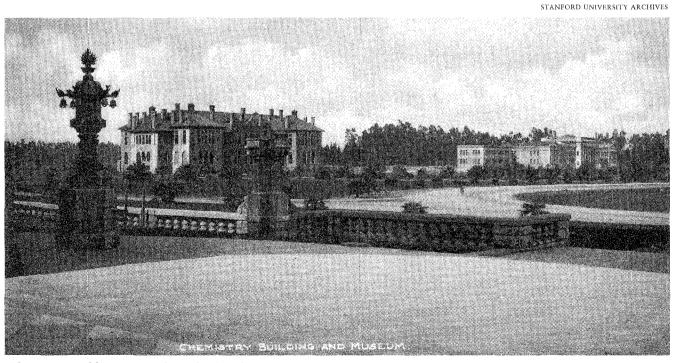
In his history of the chemistry department, Professor Emeritus Eric Hutchinson speculates that the department's first chairman, John Maxson Stillman, lobbied Leland Stanford for a large separate building.³ An accomplished chemist, J.M. Stillman was the son of the Stanfords' Sacramento physician, Dr. J.B.D. Stillman. When Leland Stanford hired David Starr Jordan, he gave Jordan the power to make all faculty hiring decisions, except in chemistry, where the new president was directed to hire Stillman. Thus, Stillman probably had unusual access to the founders and was able to make his

case for a larger facility.

With Leland Stanford's death on June 21, 1893, plans for the chemical laboratory were set aside. Although Jane Stanford did not gain the bulk of her husband's estate until 1899, the new chemical laboratory was so important to her that she authorized its construction in 1897. She specified that it be located on the site selected by her husband in 1893: southwest of the existing Inner Quadrangle, on a line with the civil and mechanical engineering buildings. This describes the general area now occupied by the Mitchell Earth Sciences Building.

Financing of the five projects on Mrs. Stanford's list was peculiar. Mrs. Stanford disclosed to the trustees that in 1883 she had been given approximately one million dollars in stocks and bonds by her husband, to be held as her personal property to "secure her a competence" in the event of his unexpected death. In other words, a super-secure "rainy day" fund, not subject to probate. She also said that since 1893 the interest on the bonds had helped keep the university alive during its darkest years.⁵

But now, she was gratified to report to the trustees, the outlook was improving. The time had come to start the new buildings, and she was pleased to provide the exact source of funds: her personal cache of stocks and bonds, which she brought with her to the meeting.⁶ Her generosity was undoubtedly well-received by the trustees.



Chemistry Building as seen from the Quad, ca. 1901.

She directed the trustees to complete the buildings in the event of her death.

Architect Day develops new design

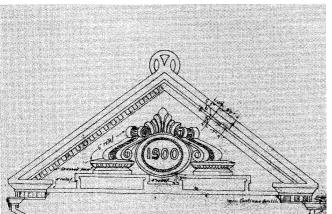
San Francisco architect Clinton Day was soon hired to design the chemical laboratory, as well as Memorial Church, the Thomas Welton Stanford Library (Building 160 on the Outer Quad, named for Leland Stanford's younger brother), and the Assembly Hall. Day's plans for the church, library, and hall were based on published plans developed a decade earlier by the university's original architect, Charles Allerton Coolidge of the Boston firm of Shepley, Rutan & Coolidge.⁷

It is now impossible to say whether Day's design for the chemical laboratory bore any resemblance to Hodges' 1893 design. Hodges, who had been on-site supervisor for Shepley, Rutan & Coolidge, stayed on as resident architect when the firm's work for the Stanfords ceased in 1891. For the most part, outside architects were hired to design larger, more important buildings, leaving Hodges to supervise construction and work on smaller projects.

Day understood and copied the Romanesque style that Coolidge had executed in the Inner Quad buildings—a style developed by Coolidge's late mentor, Henry Hobson Richardson. For the Thomas Welton Stanford Library and the adjacent Assembly Hall, constructed during 1898-99, Day adapted Coolidge's 1888 plan for the front Outer Quad buildings. Memorial Church also is similar to what Coolidge intended, although Day was forced to accommodate Jane Stanford's demand for mosaic decoration inside and out.

Day's design for the large Chemistry Building is an interpretation of the prevailing Richardsonian Romanesque style, according to Paul Turner, professor of art history and expert on campus architecture.

S.U. MAPS AND RECORDS



The similarities include use of heavy stone, arches, and the red tile roof. The window treatment, with large sandstone blocks separating windows, echoes the Quad. Chemistry's façade also is decorated with rosettes, a motif used in the Quad. One difference is Chemistry's more vertical proportions, Turner says, and another is the classical-style pediment in the central section of the facade.

University Architect David Neuman sees that pediment as reminiscent of the nearby classical-style museum. Thus, "the Chemistry Building develops a transition between the classicism of the museum and the Quad's Richardsonian Romanesque style," he believes.

Chemistry also has a small connection to Memorial Church: its top ornament closely resembles the ornament Clinton Day designed at the peak of the Memorial Church façade.

The Stanford Alumnus in March 1903 reported that "externally the building is very pleasing to the eye, its height especially contributing much to the architectural symmetry of the structure, and presents a very imposing view as one approaches the university, the red tiled roof and yellow sandstone walls and chimneys contrasting with the green of the intervening palms and pines."

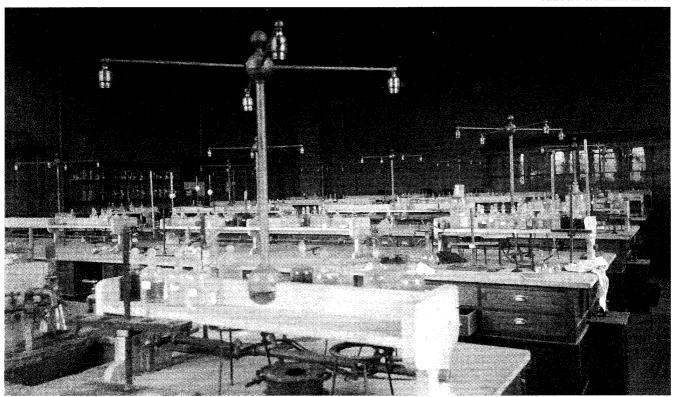
The magazine noted that architect Day was "assisted by the advice of Professor Stillman and his associates in the department."

Grand new headquarters

Construction of the 60,000-square-foot Chemistry Building began in 1900—as noted in large numerals on the central pediment—during the summer. Although some engineering departments had been housed behind the Quad in the early years, chemistry would be the first science department to have its own building outside the Quad.

STANFORD NEWS SERVICE

The similarity between the top ornament of Memorial Church and that of the Chemistry Building is evident in these two images.



One of the laboratories in the Chemistry Building; the original photograph is undated.

In early 1900, plans apparently still called for construction on the site selected by Leland Stanford in 1893 (the site now occupied by Mitchell Earth Sciences). But by spring, Jane Stanford changed her mind and selected a spot on Lomita Avenue, facing the Oval and the university's grand entrance avenue⁸—in a sense, showing off to the world what Day had designed for her, rather than hiding it behind the Quad.

This prominent structure would serve the department for about 85 years. Few other campus buildings have served a single department for so long.

Construction was largely completed in late 1902, at a cost of about \$233,000.9 Students spent eight days over the Christmas/semester break helping move in surplus stock, apparatus, and chemicals that had been stored in the old post office. Because of various last-minute problems (e.g., hardware for the desks had not arrived; electric lights still had to be installed), the final move was delayed several weeks. In late January 1903, Elementary Chemistry lecture classes moved to the new building. The rest of the department followed in February.

The sandstone-over-brick building has two main floors with 16-foot ceilings, plus an attic and basement. Two front entrances are located about 50 feet from the ends of the building. Each entrance opens on a hallway that intersects the broad central corridor that runs the length of the 235-foot-long building. Two broad stair-

ways lead to the second floor.

Laboratories were built to be "fireproof," with concrete floors and brick walls, but the corridors were lined in Port Orford cedar wainscoting. Although the building has been remodeled several times, much of its historic fabric, such as the wainscoting and ornate iron grillwork, is still there.

As originally constructed, the main floor included a large lecture room, with seating capacity of 152; two large labs for elementary chemistry and qualitative analysis that each accommodated 72 students; smaller labs for electrochemistry, water analysis, toxicology, and gas analysis; and various other rooms, including support function space and a 40 x 40-foot chemical museum/collection room for systematic arrangement of chemical preparations.

The second floor held two more large labs for general quantitative analysis, laboratories for organic chemistry and physical chemistry, a lab for physiological chemistry, a small lecture room, a library, a combustion room for analysis of organic compounds, and private labs for advanced students and research use. Faculty offices and labs also were on the second floor.

All together, the laboratories had 400 work stations, and 400 student lockers were installed along the first and second floor corridors at a time when overall student enrollment totaled about 1,400.

The attic was originally divided into five rooms, two of which contained stills and tanks used to make distilled water. The basement held stock rooms, a boiler for producing steam heat and operating the stills, a gas machine that provided fuel for laboratory use, and an electric converter that supplied power for motors and electrochemical work.

Laboratory countertops were made of soapstone, a substance that stands up to strong acids and alkalies, and resists staining. Pre-earthquake photos show an incredible array of small chimneys—39 according to the blueprints¹⁰—that were connected to the interior ventilating system. They cleared the air by a vertical draft of a lighted gas jet.

The high ceilings allowed for extensive use of windows, and three skylights illuminated the upper corridors and stairs. Most of the doors in the building included panels of corrugated glass, as did the transoms above the first-floor doors.

A companion one-story assay laboratory for testing metal content of ores was constructed behind the main building.

Workhorse building

As the years passed, what is now referred to as the "Old" Chemistry Building functioned as a quiet workhorse for thousands of students—chemists, chemical engineers, pre-meds, and others, including many training to become high school chemistry teachers.

While the building was damaged in the 1906 San Francisco earthquake, it did not collapse as did other structures built under Mrs. Stanford's direction: a just-completed grand neoclassical library directly across the Oval from chemistry, new wings at the museum, a large neoclassical gymnasium across from the museum, Memorial Arch at the front of the Quad, and the tall spire on Memorial Church.

The quake shook down the chimneys connected to the laboratory fume hoods, and the façade pediment fell. A new ventilation system was installed during restoration, eliminating the 39 chimneys. Unlike the church, whose walls were taken down and rebuilt with reinforcement, the Chemistry Building's damaged masonry was initially patched with brick rubble behind the sandstone façade.

The building was slightly modified in the 1910s and 1920s. The direct current supply provided by large banks of batteries was replaced by a supply from a large DC generator, and AC current for illumination was installed. At some point, probably in the 1920s, parts of the building were seismically braced with concrete and steel.

THE THE TENNING AND THE TENNIN

In the 1906 earthquake, the Chemistry Building lost its façade pediment and most of its chimneys.

Otherwise, the building remained pretty much the same until the 1960s, when the large lecture theater was remodeled and the north end of the building was made into the Swain Chemistry Library.

The Chemistry Building's quiet existence was interrupted on April 1, when students 1957, awoke to a Stanford Daily report that the building had been seriously damaged during a spring break earthquake, and would be closed for a week. There were deep cracks in the building's foundation and walls, and windows were broken, but all would be repaired by April 8, the paper reported. Alternative room assignments were listed for several classes; all



The building was slightly modified in the 1910s and 1920s. The direct current supply provided by large banks of batteries was replaced by a supply from a large DC generator, and AC current for illumination was installed.

other chemistry courses were canceled, according to the newspaper.

The last line of the article pointed out that "today is April Fool's Day." Nevertheless, chaos reigned, recalls alumnus G. Robert Hamrdla.

The recipient of many post-war external research grants, the chemistry department prospered and soon outgrew its quarters. This led to construction of the three Stauffer chemistry buildings behind the old sandstone building in 1960, 1963, and 1966. Then, in 1977, the new Seeley G. Mudd Building took over as departmental headquarters. Some chemists continued using the Old Chemistry Building, but it also was opened to other uses. One large laboratory became the site of a popular student-organized course in bartending. Left-over bottles from the course were still there years later. The lecture theater was used for various lecture series, including one on women's health.

Declared a hazard, the building was decommissioned in stages in the mid-1980s, with the Swain Chemistry Library finally moving out in 1987. By early 1988 it was essentially closed, although J. Murray Luck, professor emeritus who had joined the chemistry faculty in 1926, still had access to his second floor office, and it was still used for storage.

As in 1906, the Old Chemistry Building was still standing after the 1989 Loma Prieta earthquake. The shaking set off automatic sprinklers, leaving a behind a mess of wet plaster and lath, according to Harry Mosher, professor emeritus of chemistry. Several large chunks of sandstone fell off a chimney, smashing the passenger compartment of a car just minutes after a student who parked behind the building got out of the car. Soon thereafter, officials erected a chain link fence around the building—and the car.

Jane Stanford at the end

Beginning with her presentation to the trustees in mid-1897, Jane Stanford had insisted on constructing large stone buildings, initially with her own rainy day funds and later with proceeds from her husband's estate. Once the estate was settled, President Jordan had assumed money would be quickly available for more faculty positions and higher salaries. But buildings continued to be more important to Mrs. Stanford, who usually vetoed his requests.

Privately, Jordan often referred to this time as the "stone age"—to Jane's annoyance when she heard about it. To the credit of both, they managed to work out their differences and concentrate on the university and its future.

Near the end of her life, Jane Stanford grew somewhat philosophic about her incessant focus on grand buildings. On Feb. 14, 1905, one day before sailing to Honolulu, she wrote a speech for the cornerstone laying of the large new library she was constructing across the

Oval from the new Chemistry Building. She asked that a young student, Alexander Sherriff, '06, read it for her. Exactly two weeks later, she died unexpectedly in Hawaii.¹¹

Mr. Sherriff read the speech at the May 15, 1905, cornerstone laying, including these words:

"My fondest wish has been to give to you young students all the requisite buildings planned by the founders, and the erection of this library marks the end of the material side in which I have been, for the past eight years, so intensively interested. . . .

"The 'stone age,' which has been so frequently alluded to, no doubt was irritating and tedious to some connected with the university, but to me the erection of these stone buildings had a deep and important significance.

"These noble buildings are not alone for the present but for ages to come, when generation after generation has passed and gone and when, I hope and pray, these buildings will still stand and serve the purpose for which they have been erected, namely, for the benefit of

Old Chem's Hardware Costs Considered Excessive

Despite her great wealth, Jane Stanford exercised the same frugality in constructing her "noble" sandstone buildings as she forced on President David Starr Jordan's faculty salary budget.

In a September 1903 letter from Melbourne, Australia, she asked her brother Charles Lathrop to watch over architect Clinton Day and to keep costs in line on the new neoclassical library Day was designing for the site across the Oval from the Chemistry Building:

"Mr. Day is in the minority always when he undertakes to put any useless things in the interior such as I do not approve of,

such as he did in the chemical building, fancy door knobs and fancy springs costing \$3 each when he could have done them for one dollar (\$1). I have never forgotten this neither have I forgotten his reckless putting up doors with glass and he must be held in check."

the young of our land who will still be coming here to gain an education. . . . "

Not all of Jane Stanford's "noble" buildings survived as long as she prayed, but some have, including, at least for now, Old Chemistry.

A A A

NOTES

- 1. The story appeared in the San Francisco Call on Dec. 15, 1895. The student newspaper was not then publishing because of Christmas break, but on Jan. 7, 1896, it published the text of Jane Stanford's Dec. 23 letter thanking the firemen.
- 2. Stanford Univ. Archives, Plant Services papers, SC123/Box 1/ Chemistry folder.
- 3. Eric Hutchinson, *The Department of Chemistry, Stanford University*, 1891-1976. Dept. of Chemistry, Stanford University, 1977. Also very informative is the text of a January 1988 speech by Hutchinson to the Stanford Historical Society, "From Stillman to Parks: The Early History of Chemistry at Stanford," in the Hutchinson biographical file at Stanford News Service.
- Supplement to Jane Stanford's June 1, 1897, address to University Trustees. Stanford Univ. Archives, Jane Stanford papers, SC33b/ Series 5:Univ/Box 1/Folder 9: Board of Trustees – Papers 1897.
- 5. Two typescripts of Jane Stanford's June 1, 1897, address to University Trustees in Stanford Univ. Archives, Jane Stanford papers, SC33b/Series 5:Univ/Box 1/Folder 5: Board of Trustees Addresses.
- Conveyance of securities in Stanford Univ. Archives, Jane Stanford papers, SC₃₃b/Series 5:Univ/Box 1/Folder 9: Board of Trustees-Papers 1897. Also, a copy in list form can be found in Folder 8-List of Bonds.
- 7. Paul Turner, *The Founders and the Architects: The Design of Stanford University*. Stanford Department of Art, 1976. This is the best overview of the original campus plan.
- 8. Published accounts do not explain why Mrs. Stanford changed the location. Regarding siting, see the *Daily Palo Alto*, Feb. 6, 1900, and May 30, 1900; also the *Stanford Alumnus*, February 1900 and April 1900.
- Chronological Summary of Construction, compiled by the Planning Office, in Planning Office papers, SC486/Box 1/Folder 3.
- 10. Stanford Univ. Maps & Records, quad 7, building 200, folder A-1257 contains an attic and roof plan showing 39 chimney vents.
- 11. Letter to George Crothers in Stanford Univ. Archives, Jane Stanford papers, SC33b/Series 1/Box 2/Folder 10.

Karen Bartholomew, '71, worked at Stanford News Service for 25 years. She has been a member of the Historical Society since its inception. Her husband, Claude Brinegar, holds three degrees from Stanford and is a retired oil executive.

Stanford Sadie

and the Early Years of KZSU Radio Broadcasting

BY C. STEWART GILLMOR, '60

Sadie Guess Who?
Announcer Who?
Sadie Stanford Sadie, that's who.
Theme up and under

Thus started another episode in the 15-year run of the Stanford Sadie show which aired late Monday nights on Stanford student radio station KSU (later KZSU) from 1947 until 1961. Described in the Stanford Daily variously as "Aphrodite of the Airwayes," "Sizzling Sadie the Sultry Siren," and "Shady Lady," the Stanford Sadie show was the most listened-to program from KZSU. The Sadie show was only one of the zany products of the campus radio station in its early years.

Early Radio At Stanford

College radio as a phenomenon appeared just after the end of World War II, although a few colleges had radio clubs before the War. It was no different at Stanford. The first radio broadcasts from Stanford were by ham radio experimenters, both faculty and students. Amateur ham radio on the campus began before World War I. Although there was some limited broadcasting of voice and music, the ham radio enthusiasts mostly tried new circuit design schemes and attempted to contact other ham radio operators across the world.

Two of the most famous early

Stanford radio experts were Cyril F. Elwell, '07, and Leonard F. Fuller, Ph.D. '19. After Elwell got in trouble with a university trustee for hanging his radio antennas from Stanford buildings after the 1906 earthquake, he moved his radios to Palo Alto and started what would become the Federal Telegraph Company, Palo Alto's largest employer for a number of years. Two younger ham radio pioneers at Stanford were Frederick E. Terman, '20, Eng. '22, (later to become head of the electrical engineering department, dean of engineering, and vice-president and provost of Stanford), and his young buddy and later pupil Herbert Hoover, Jr., 25. Terman and Hoover made sets and transmitted from their families' homes on campus. Terman got his amateur radio license in 1916.

The Stanford amateur radio club was founded in 1925, when Terman was teaching in his first year at Stanford.2 Hoover took two electrical engineering courses with Terman in that year and tested receivers and home-made transmitters from his room on the second floor of Toyon Hall, operating as experimental station 6XH.3 This work was continued by other students and for many years the Stanford amateur radio club station W6YX was guided by famed radio engineer Professor O. G. "Mike" Villard, Jr., Ph.D. '47. With Terman's return from MIT to the Stanford faculty,

the university was to begin a climb to a top world ranking in radio and communications engineering study and research. Many electrical engineering students would contribute to the construction and operation of a Stanford radio broadcasting station after World War II.

Radio Station KSU and its Founding Years

Returning veterans after the war lived in Stanford Village, a large cluster of buildings in Menlo Park built as a hospital to handle U.S. naval casualties in the event of a land invasion of Japan. Students in the Village submitted plans to the Stanford Ex Com on October 1, 1946, proposing a radio station and the plans were approved the next day. The station planners hoped to provide a worthwhile experience and broadcast lectures, debates, news, and good music, as well as fun. Lots of work was required to get the station ready for its first broadcast at the start of winter quarter. William Eilers, '47, was the first station manager. Byron "Steve" Phillips, '49, was another early station manager and arranged for Winston S. "Doodles" Weaver, '37, to appear on the first radio show. January 6, 1947. Doodles (brother of Pat Weaver, head of NBC radio in the 1940s and uncle of Stanford grad and film star Sigourney Weaver, '72) had been thrown out of Stanford for a year in 1935 for

his various shenanigans; he went on to be the headline comic with the Spike Jones Orchestra for a number of years. On the first radio show, Doodles gave his rendition of "The Axe Yell" and the "Indianapolis Speedway Race" as well as his own composition "Nuts to Cal." There of attention to student radio stations in those days, especially if the stations broadcast over the power lines. This type of transmission was called "carrier-current." Basically, the radio signal was passed along a transmission line (the 110 volt AC lines) in the buildings and when you

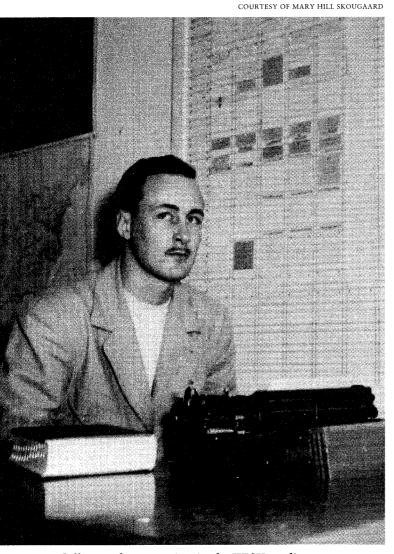
plugged your radio into the wall you were coupling into the signal. KSU at Stanford in its first months chose a frequency of 590 KHz and later changed to 880 KHz (880 kilohertz was called 880 kilocycles in those days), right about in the middle of the AM broadcast band and near the frequency of station KGO at 810 KHz. Carrier-current was not a problem for the FCC if your signal could not be heard more than a fraction of a wavelength away from the power line. At 880 KHz, this meant that it was OK if you could receive KSU in the dorms or on your car radio if parked in the Encina lot, but not OK if you were driving along Bay-

shore Highway!

KSU's first adviser was John V. Zuckerman, Ph.D., '51, at the time a graduate student. Another early adviser was Dr. Skipwith "Skip" Athey, Eng. '43, Ph.D. '47, an electrical engineer who was quite interested in broadcast radio and film and had produced documentary and educational films during the war. Athey,

Villard, and almost 40 other Stanford engineers and scientists had been part of Dr. Fred Terman's 800person staff during WWII in the Radio Research Laboratory. This was a super-secret radar countermeasures lab housed at Harvard but with technical experts in England and wherever the Allies were fighting. Back at Stanford after the war, Athey's academic thesis included in part the design and construction of the recording and broadcasting studio on the north side of Memorial Auditorium which would become the main studio of KSU (the room has been completely dismantled in recent years). Athey recalls that recordings were cut on a massive, ancient but high-quality recording machine that had been donated by radio station KCBS in San Francisco. Two engineering students who helped build the original station were Ray W. Sanders, '48, and Fred W. Terman, '49, son of then engineering dean Fred E. Terman.⁵

Another long-time adviser was Professor Stanley T. Donner of the speech and drama department, a nice guy whom radio students referred to as "Yelnats T. Rennod" when not in his presence. KSU joined the Intercollegiate Broadcasting System, and the station elected a full complement of officers: station manager, traffic manager, music director, sports director, chief engineer, and so forth. The initial station at the Stanford Village moved to Memorial Auditorium during spring vacation 1947, with the help of the speech and drama department. KSU came back on the air from their new campus studio on April 6, 1947, with additional equipment, a new broadcasting console, and lots of new records.6 But there was also a new item which would become the station's hottest show for the next fifteen years - the sultry mystery radio voice of "Stanford Sadie."7



Steve Phillips at the typewriter in the KZSU studio.

was a temporary studio, record players, and a piano in the Village radio station and the students took the call letters KSU. "K" was used for radio stations west of the Mississippi River, and "SU" stood for Stanford University.

The Federal Communications Commission (FCC) didn't pay a lot

The Birth Of Stanford Sadie

The Stanford Sadie Show was designed by Steve Phillips for the male students as an antidote to study, targeting especially the frosh in Encina. Sadie was designed to "lure Stanford roughs from their books." Veterans remembered the wartime propaganda broadcasts of Axis Sally and Tokyo Rose—Sadie was to be Stanford's answer. As the Daily of July 1, 1949, put it, "Sadie is the femme fatale of the campus. She succeeds with students where Axis Sally and Tokyo Rose failed during the war with the troops." Station manager Mary Hill, '50, (herself the fourth in the line of Stanford Sadies) said to women hoping to be chosen as Sadie: "Bring your best tones and your asbestos gloves with you to the tryouts." Sadie's scripts were often just as hot as the censors would allow, and Sadie frequently was in trouble with the dean's office. Most Sadie show scripts were written by producers such as Steve Phillips, Herb Seiter,'51; Barbara Gifford, '54; Fred Krock, '54; and Warren "Walt" Epinette, '56. But Sadie herself wrote scripts over the years. June Livingston, '52, having written scripts for radio station WNYC in New York, showed up for a scriptwriters tryout. June's low husky voice got her the Sadie job instead. After her stint as Sadie, June said, "When I came to Stanford I was more the Bostonian type. Now I'd probably be banned in Boston."8

About half the Sadies claimed then, as they still claim today, that they did not understand the double entendres they were reading from the Sadie scripts. However this may be, it is a fact that the Sadies and their buddies wrote some of the scripts themselves. Marise Cherin, '55, as Sadie, whispered "Hello, darling... Been getting any loving



Judy Muller and Jim Harvey during a Sadie broadcast, fall 1957.

lately? Well, just cuddle up, and tell me all about it—because you know, sweetheart, I love YOU more than anyone else . . ." According to the *Daily* of December 2, 1952, when Marise broadcast in her soft, sultry, and suggestive voice all revelry was stilled and even Rossotti's closed early because of the lack of customers.

The Kidnapping of Stanford Sadie

In the days before quality tape recording, the Sadie show was broadcast live. By the mid-1950s it was taped ahead of time in a secret location (usually just in the studio but on Saturday morning or Sunday). But in the years of live broadcasting, there were a number of attempts to kidnap Sadie. During the third attemp, in 1947-48, men from Encina and Toyon raided the station and succeeded in tying up station manager Steve Phillips, later dumping him on a table in the *Daily*

shack. Other roughs carried Maile Scott, '49, off in a convertible last seen heading for Lake Lagunita.⁹ Maile has fond memories of this and suspects she knew the boys involved. June Livingston, Sadie in fall 1950, recalled avoiding a kidnap attempt by quickly changing places with an announcer in the studio during a raid.¹⁰

Stanford Sadie's identities in KSU's first couple of years were unknown to the listening public. Maile Scott, Rosemarie "Butch" Armstrong, '49, and Ann Reed (the only non-Stanford student Sadie) were never publically revealed as Sadies. But Mary Hill, KSU's first female station manager, was identified as Sadie in a Daily article in 1950. Sadie appeared over the airwaves throughout the school year on Monday nights, and beginning in 1951 her photo appeared in the Daily during the last week of each quarter. In the 1951-52 year, the Sadies were Helene Buchtel '55,

Rita Considine, '54, and Beverly Poole, '54. 11 Beginning about 1953 and for the rest of the Sadie years, Sadie appeared only during fall quarter and her identity was revealed with much fanfare on the last Sadie Show and in the *Daily*, about the time of the Big Game.

The Marketing of Sadie

In the early years, two attempts were made to franchise the idea of Sadie. In one case, Steve Phillips worked with the University of Southern California radio station KUSC on the idea of a USC Sadie. Phillips also planned to have Ann Reed portray Sadie on the air in Portland, Oregon. Ann, a Pomona College alumna, was a high school teacher at Castilleja School in Palo Alto when she was Sadie. She went on to teach in Portland and do radio broadcasts there. Nothing came of these schemes, but there was one special request in 1948 from the U.S. Air Force for a recording of Sadie. The recording was flown to Japan on a military flight to be played at a reunion of U.S. airmen in Japan. Maile Scott was a model during her years at Stanford and after. Look magazine in 1948 asked for a pinup picture of Maile which was sent to the magazine.

First Clash with The FCC

Things sailed along fine at KSU for its first two years, until the Federal Communications Commission decided to get tough with college radio. The FCC had not previously required college carrier-current stations to be licensed or registered. In April 1949 the FCC announced that it was considering several options under proposed new regulations: 1) Place campus stations in the non-commercial FM radio bracket; 2) Ban campus stations entirely, 3) Place campus stations under general broadcast rules, or 4)



Judy Muller poses as Sadie, 1957.

Leave the situation unchanged.¹²

Option No. 1 would require changing to FM, and in those days few students owned FM radios. Option No. 2 clearly would end the days of Stanford radio. Option No. 3 would greatly increase the cost of operating the station, since it would require professional staff. In addition, because of the great increase in post-war applications for AM, FM, and TV licenses, the FCC nounced that no more three-letter station calls would be allowed. It turned out that a small Texas AM radio station had previously been issued the call letters KSU by the FCC, and the FCC had not been happy that Stanford was using the call letters of another station. Even though Stanford students learned that the small station was no longer on the air, the FCC was adament. If Stanford were to have a legally operated radio station, it must have four call letters. For almost two years, the Stanford students submitted more than 40 suggestions for call letters. Finally, on May 11, 1949, the FCC registered the new call letters of KZSU. The Stanford station began using those call letters in late May 1949 on what was called "Z" day at Stanford. Things were thus fixed temporarily.

The FCC continued to push to eliminate college carrier-current stations but for the next decade compromised by asserting more regulatory control, otherwise leaving KZSU and its sister stations alone. They could broadcast at any hour, sell commercials, and generally do what they wished as long as they did not radiate signals more than a few yards outside campus buildings.

The speech and drama department established a KZSU board with a faculty advisor as chair and with several KZSU directors as members. This board met weekly or semi-monthly, applied for funds to buy transmitter parts and records, and arranged for sponsors to sup-

port the costs of the news teletype wire. Some records were sent free to KZSU, most others were available at substantial discount from record companies. Used or donated equipment was likewise obtained from local companies such as Hewlett-Packard and Ampex.

Sadie Scripts and Shows

Although Sadie producers wrote most of the scripts, Sadie herself turned out quite a few. Some were plays upon the classics such as the Shakespearean epic written by Herb Seiter and Barbara Gifford in the winter of 1952:

"She forgot to pull the shades in her boudoir, or, Julius Sees Her."

Chaparral writers also contributed, including, in 1951, Dunlap "Dunny" Clark, '53, later the editor of the Chaparral. In 1956, Nancy "Tip" Jackson, '59, as Sadie conducted an experiment in mass hypnotism on the boys in Wilbur Hall. The Daily had run a photo of a woman other than "Tip" at the start of the quarter to mislead the public about Sadie's identity. Following the recorded Sadie show, "Tip" as Sadie answered call-in questions from the love-lorn. The start of the quarter to mislead the public about Sadie's identity.

Sometimes the script-writers were only a page or two ahead of Sadie reading the scripts. At times the scripts bordered on questionable taste. During the mid- and late-1950s, for example, an annual theme was Sadie visiting the football team and getting chalk marks all over her back. Here are some phrases from a Sadie script of 1957:

Oh my lovers, especially my babies at Wilber [sic] of course its me-Stanford Sadie. I've been waiting all week, to tell you about all the love I have for you, and my latest adventures. This week is Big Game week and believe you me it has been a big week for me already. I've been devoting all my time to stanford [sic] spirit. Some girls sing and dance in Gaities, others make little red and white flowers, but Sadie makes sure that the football team wins on Saturday. . . . As much as I like the Big Game itself, there is another Big Game which will be played next Saturday night, and it's not going to be on the gridiron."

Judy Muller, '60, who read this script as Sadie, writes that when Father Tierney, the Priest at St. Ann's Chapel in Palo Alto, learned Judy was Stanford Sadie he said, "I never thought you would do such a thing like that!"

In addition to giving steamy monologues and advice to the lovelorn, Sadie sometimes awarded "dates with Sadie" at the end of the Quarter based on an essay contest. Sometimes Sadie was a Big Game date. The *Daily* loved to describe Sadie's measurements and eyes: Sadie was usually 5' 5" to 5' 7", had blue-green or hazel eyes, was 35-24-34, give or take an inch, and weighed 110 to 126 lbs. Sadie came as a blond, brownette or brunette. All the Sadies had low sultry voices.

Sadie scripts got so seamy that by the late 1950s, Dean of Students H. Donald Winbigler wanted to see the scripts ahead of time and told Sadie producers that the show would be monitored. A number of Sadies had their own radio DJ or talk shows and at least one Sadie, Evelyn Dees, '58, Sadie in 1955, was required to visit Dean Winbigler's Office to discuss the appropriateness of her on-air patter. Another Sadie, Mary Alice Hood, '56, Sadie in 1954, had a special "hot" photo of herself which she would autograph and send to a few lonely, lucky frosh men.

Sadie's troubles with the administration began as early as 1948 when Station Manager Steve Phillips found himself in a meeting with Hubert Heffner, the head of the speech and drama department, in the office of Stanford's Acting President Alvin C. Eurich. Eurich opined that Sadie was a "revolutionary" and against the Stanford fundamental standard. He wanted to cancel the show. (Heffner was against the idea of a "radio" major within the speech and drama de-

Discipline dilemma

The administration's role in student discipline can be traced as far back as Jane Lathrop Stanford. Mrs. Stanford had always been concerned about student conduct, especially the reputation of the female students. President David Starr Jordan believed in student freedom, with no written regulations for conduct, but Mrs. Stanford pushed for what eventually became the written fundamental standard and honor code. Trustee and Judge George Crothers wrote to a colleague in 1904 that Mrs. Stanford "made a vigorous protest to me against the laxity of student discipline, especially as to the girls"15 So Stanford Sadie could blame the original Stanford lady for her troubles with the deans.

partment but Rosemarie Armstrong persisted and even took part in the first television course given at Stanford.) At the meeting with Eurich, Phillips somehow argued successfully against censorship, and Sadie continued.

Daily Operations at KZSU

KZSU broadcast originally in the evenings. By the mid-1950s KZSU was on from 3 pm until around midnight, and later on Friday and Saturday nights. Occasionally KZSU would simulcast some cultural event at Stanford with another station in the area. Two KZSU regulars, Jim Gabbert, '58, and Gary Gielow,'57, left Stanford temporarily in 1957 to operate their own commercial FM radio station, KPEN, and for a short time KZSU simulcasted KPEN programs in the morning. For a time KZSU did the same with station KPFA in Berkeley. (With talent and hard work Gabbert developed his \$2,000 investment in KPEN in 1957 into a siz-

able broadcasting operation which the *San Francisco Chronicle* reported on July 1, 1998, was worth \$150 million.) From its earliest days KZSU did "remotes" – taking

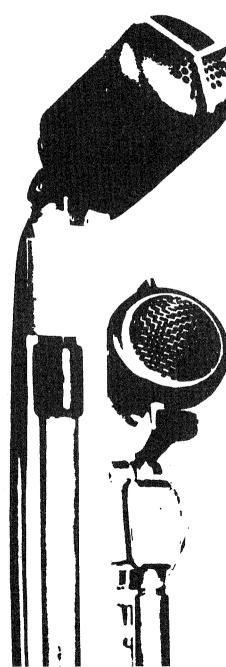
a small portable console to a sports or a news event and broadcasting over a telephone line connection back to the studio which then put the remote signal on the air. KZSU had a staff of about 20 to 30 hard-core regulars and up to 40 occasional contributors.

Some regular shows provided the classical music required for the Introduction to Music course in the music department. Other shows provided music suitable for studying. Cigarette companies (Lucky Strike and later Marlboro) frequently sponsored newscasts and sports shows. Local stores, restaurants, and gasoline stations bought "spot" commercials. In the late 1940s, KZSU plugged the Lucky Strike contest giving away a television set (with a very tiny screen) to the Stanford living house which collected the most Lucky Strike cigarette packs. One of the early "big" productions was the radio soap opera which opened: "AND NOW . . . PATHWAY TO **PASSION."** There were jazz shows, such as "Swingshift" or "The History of Jazz," which featured Dean of Engineering Fred Terman's youngest son, Lewis, '56. There were rhythm and blues shows such as "Harvey's Choice." There were folk music shows and novelty shows such as "Feeding Time on the Farm." Famous Olympian Bob Mathias, '53, had his own weekly sports talk show during 1952. 16 The speech and drama department's student radio plays were broadcast from KZSU as well as special events, concerts, and the annual Spring Sing.

Technically, KZSU was a part of the speech and drama department, and the upstairs studio "A," built by Dr. Athey, was used during the daytime by the department for classroom instruction. By the mid-1950s a smaller studio "B" was added down in the basement of Memorial Auditorium along with the KZSU record library, the news teletype, the engineering cage, and the army field telephone switchboard.

KZSU, the Chaparral, and the Spring Sing Fiasco

Each spring in mid-May, the Rally Com sponsored a Spring Sing, held outdoors in Frost Amphitheatre on a Friday evening. KZSU, just across the street from Frost, provided sound equipment for recording the concerts and often handled the sound editing to produce a 12" long-playing record of concert highlights for sale to the public. About 40 campus groups would enter the competition. Groups were judged 30% on appearance, conduct, and originality, and 70% on musical technique. Perennial winners were the Medical School students and nurses. Rag tag groups such as the Chaparral magazine crew didn't fare as well. The singing competition itself was strictly a capella, although there were instrumental groups on occasion as warm-up acts and at inter-



mission. For unknown reasons, in 1958 KZSU decided it wanted to enter the Spring Sing. What followed was a little like the attack scene from the last reel of the film *Animal House*.

The KZSU chorus, attired in wine-colored choir robes borrowed from the Menlo Park Presbyterian Church by John Hinners, '59, was a Spring Sing entry for religious music. A KZSU quintet composed of Stew Gillmor, '60, Ron Hare, '60, Bill De Armond, '60, Sheldon Fay, '59, and Jim Harvey, '58, had recorded a rock 'n' roll background on audio tape, timed so that the KZSU chorus could sing to it. KZSU writers, in collaboration with Chappie buddies, wrote some blues verses about Dean Winbigler, the Stanford Fundamental Standard and Honor Code Committee, and so forth. The KZSU group entered the Frost outdoor stage, began a hymn, and then a giant sound system in the bushes boomed out the illegal instrumental rock 'n' roll audio accompaniment. The 15-odd

KZSU choral singers began rocking around the stage singing the ditty "Fun Stan Momma," written for the occasion:

Fun Stan Momma, Don't you
Honor Code Me
Fun Stan Momma, I'm as Blue as
I can Be
Had a Girl in My Room, Forgot
to Close the Door
Winbigler Wandered Down the
Hall
He Found Us on the Floor. Oh

Fun Stan Momma, Don't You Honor Code Me Fun Stan Momma, I'm as Blue as

Fun Stan Momma, I'm as Blue as I Can Be.

Somewhat of a scandal followed. The faculty judging committee was to have been Sandar Salgo, the Stanford symphony conductor, and Stanford Choral and Assistant Choral Directors Harold Schmidt and Robert MacKinnon. At the last minute Salgo fell ill and was replaced by none other than Dean H. Donald Winbigler. Needless to say, KZSU not only did not win a prize, but because of KZSU's ac-

COURTESY OF MARY HILL SKOUGAARD

Pathway to Passion broadcast with Rosemary Armstrong doing sound effects.

tions, future Spring Sings required all groups to audition ahead of time. The *Daily* made no reference to the debacle but the Spring Sing Rally Committee was extremely upset, to say the least.

The Great 1958 FCC and Pacific Telephone Raid

To permit reception of the carrier-current signal from KZSU throughout the various dorms, four satellite transmitters were installed in Toyon, Lagunita, Wilbur, and Florence Moore Halls. There were plans to add two more transmitters, to the Old Union and the Row. These transmitters originally were built on wooden chassis and featured 807 tubes in push-pull design, putting out about 50 watts of radio power; but there were always problems of insufficient signal. The primary signal from Memorial Auditorium went out on more than four miles of twisted pair wires hung along the telephone poles and in the tunnels around campus and linked each of the transmitter sites. These wires acted as balanced transmission lines, not antennas; with virtually no radio power radiating from these lines, KZSU would remain legally within FCC regulations.

While plans went on for improving and enlarging the number of transmitters, KZSU decided to improve the signal by increasing the transmitters' power and unbalancing the transmission lines, making them radiating antennas of a sort. All the dorms now heard the station but so did people in San Carlos and in Burlingame! KZSU had previously had FCC troubles over interference with KGO's signal at 810 KHz. Now they really had trouble, with more people complaining to the FCC. The FCC sent complaint warnings (nicknamed "pink tickets") to the registered KZSU licensee, Stanford President J. E. Wallace

rom the beginning, KZSU had been a social club as well as radio station. Mary Hill and Rosemarie Armstrong recall going to L'Ommies restaurant after station closedown at night, where KZSUers would play piano and sing. L'Ommie's "Papa Pierre" was a major KZSU supporter and enjoyed KZSU musical parties held in his back room. Mary remembers mixing "5 legged mule" punch (1 part each bourbon, sweet vermouth, vodka and burgundy). She recalls that it looked like planter's punch but melted the ice a lot faster. In later years the Oasis in Menlo Park was a favorite. In fact, Rita Considine, '54, Sadie in '52, met her husband Gene Tutt at the Oasis. where he was working his way through school tending bar. He and Rita were married the next year and Gene bought the Oasis and ran it for two years. They were good friends then with an COURTESY OF MARY HILL SKOUGAARD unknown local musical group called the Kingston Trio.

Since KZSU parties so often featured piano playing, singing, and musical combos, a couple of pianos (from the junk pianos donated for use in student musical productions) were borrowed on permanent loan from Memorial Auditorium. One was an ancient Steinway upright which, though missing guite a bit of veneer and half of its ivory key facings, was a good piano. By 1959, these musical KZSU parties were often held in the nearby community of Los Trancos Woods, where four or five KZSU engineers rented a couple of old uninsulated summer houses and the pianos took rest there. KZSU staffers had organized a society. "The Friends of the Wagnerian Opera," with a major subsidiary group, "The Los Trancos Woods Community Marching Band" (LTWCMB). The band was featured in a Chaparral photo article in the Fall

> 1962 issue as well as in Herb Caen's column in the San Francisco Chronicle and in other media. The LTWCMB marching band continues today, has its own website, and performs regularly at San Francisco Bay festivals and parades. Some people who have seen this band believe it was the inspiration for the current antics of the Leland Stanford Junior University Marching Band.

Sterling. These arrived in summer 1958 but the administration did not respond, being either on vacation or otherwise busy. After several notices, the FCC decided to take action. As the FCC was about to come on the scene, the Pacific Telephone Company was also interested in operations at KZSU.

Electrical engineering students at KZSU were very interested in the new plans for long-distance dialing (then called "DDD"). They built their own automatic dialers and experimented with them using the telephones; sometimes, these calls were made using the war surplus army field phone switchboard in the KZSU engineering cage. Since KZSU staffers connected it to the speech and drama department phones, Stanford was being billed for the calls. All this gave the FCC and Pacific Telephone reason to work together, and in late August 1958 they carried out a raid on KZSU. They nabbed a single lonely sophomore, sitting in the engineering cage. Casehardened pad locks were installed on all KZSU doors and equipment and the *Daily* of Friday, September 26, 1958, screamed from its front page:

FCC WARNING - KZSU gets indefinite suspension.

Another in a series of reprimands from the Federal Communications Commission has been the final factor in a University decision to indefinitely suspend operation of campus radio station KZSU. The latest warning from the FCC came on the heels of reports of alleged wrongdoing by station staff members and at a time when the University's radio-television committee was surveying the value of the station to Stanford Assistant speech and drama professor George Willey told the Daily that the FCC had previously reprimanded the station several times for its attempts to reach a greater portion of the campus through use of transmitters which had excess radiation. The lat-

est warning, based on a June test, was contained in a "correct or cease operation" letter to President Wallace Sterling Since it apparent was that previous warnings had not corrected the situation, and since the station was in a controversial situation the other two fronts, University officials ordered the shut down.

After further university hearings, "according to dean of students H. Donald Winbigler, a final re-evaluation of KZSU's organization, functions and future will be made." That was it. No Stanford Sadie for 1958, no KZSU. No Stanford Sadie for 1959!

Sadie's Last Years

The FCC shutdown was a cruel blow to Stanford Sadie. She packed her bags and didn't return until she gave the old town one last chance in the Fall of 1960. The *Daily* of October 2, 1960, announced in banner frontpage headlines:

KZSU Returns to Air; New Schedule Announced - Stanford Sadie Back as Siren

Returning to KZSU is Stanford Sadie, "Siren of the Airwaves." Her traditional fall quarter appearances, interrupted only in the last two

years when KZSU was off the air will occur Monday evenings.

The last full Sadie team was produced by this author, Stew Gillmor, and engineered by Ron Murphy, (both E.E. majors, '60, neither of whom managed to graduate on time) and a couple of part-time script-writers. Stanford's last fulltime Sadie was Judy Hughes, '62, like the other Sadies gifted with a sultry voice and faced with the same old antics with the football team and win-a-date-with-Sadie essay contests. It must be said that a weak attempt to bring Sadie back in 1961 resulted only in perhaps two broadcasts, and nobody, even the 1961 producer, can remember anything about those two broadcasts. It was the end of an era.

Times had changed. The KZSU students of the later 1950s had pleaded with the university without success to get a non-commercial FM "real radio" license. It finally happened after Sadie was gone. On October 13, 1964, KZSU inaugurated its FM transmitter on 90.1 MHz in the non-commercial portion of the FM Band. On October 15, 1970, its antenna site was moved from the roof of Memorial Auditorium to a site in the foothills.

The old KZSU had always been fully student run. No one received any pay or salary. Nearly all of the equipment design, construction, and maintenance was done by students. The speech and drama department had only a nominal control over things. Large-scale integration was not vet the style in electronics or in student radio station operation. By the 1960s the days were gone of carrier-current radio, of returning veterans knowing about Tokyo Rose, of students in the Village, of wires strung around the campus to the basments of dormitories, and of students making their own KZSU transmitters. And the days were gone too for Stanford Sadie, the "Sultry Siren of the Airways."

Sadie disappeared, but what happened to the KZSUers of those early days? Some remember the days hanging around down at "the station" as among the best days of their youth. Besides being a source of fun, KZSU was a valuable training ground for engineers and future broadcast professionals. A number of those primarily interested in broadcast and speech went on to careers in advertising, network broadcasting, and radio, film and TV production, or to careers in modelling and merchandising. Others became lawyers or physicians or teachers. The engineering types for the most part graduated and went on to build and invent things, with some founding their own companies. One, Martha Evans, '61, became the first woman president of the IEEE, the largest technical organization in the world. In my own early years of teaching, I ended up for a time as faculty adviser to the student college radio station WESU, and one of my student chief engineers, after getting his bachelor's degree, came out to Stanford for graduate work in E.E. As a former faculty adviser to a college radio station, looking back, at times I felt much as Dean Winbigler must have felt.

ACKNOWLEDGEMENTS

cates a Sadie.

Skipwith W. Athey, Ph.D. '47 Byron "Steve" Phillips '49 *Maile Allen Scott, '49 Paul S. Bauer, '50 *Mary HILL Skougaard, '50 Frank E. La Fetra, '51 Joan Coldren Alpert, '53 *Rita Considine Tutt, '54 *Beverly POOLE Piotti, '54 Warren W. Epinette, '56 *Mary Alice HOOD Ford, '56 George J. Strom, '56 *Evelyn Lloyd Dees, '58 James A Harvey, '58 Philip A. Fialer, '60 * Judy MULLER Griffiths, '60 Ronald L. Murphy, '60 *Judy Hughes Fair-Spaulding, '62

In writing this piece I enjoyed the cooperation of many former KSU and KZSU staffers. I thank those named below for their phone calls, letters, interviews, scripts, and photos. There probably were two dozen Sadies over the years and perhaps 250 different KZSUers during that period. An asterisk below indi-

*Rosemarie ARMSTRONG Ostberg, '49

ENDNOTES

- 1. Ward Winslow, "Tall Trees," Sandstone and Tile, vol.18, No. 2, Spring 1994, 3-12, pp.11-12.
- 2. Campus Report, November 26, 1975,
- 3. Stanford Univ. Archives, SC160, F. E. Terman Papers, Series XIII, Box 1, Folder 23.
- 4. Stanford Daily, September 30, October 1 and 3, 1947.
- 5. Stanford Univ. Archives, SC160, F. E. Terman Papers, Series XIV, Box 12, Folder 8, F. E. Terman to Ray W. Sanders, January 29,1975.
- 6. Stanford Daily, April 4, June 20, 1947.
- 7. Stanford Daily, April 8, 1947.
- 8. Stanford Daily, November 25,1950.
- 9. Stanford Daily, May 25,1948.
- 10. Stanford Daily, November 25, 1950.
- 11. Stanford Daily, November 27, 1951; March 4, May 28, 1952.
- 12. Stanford Daily, April 22,1949.
- 13. Stanford Daily, October 22, 1956.
- 14. Stanford Daily, October 29, 1956.
- 15. Roxanne Nilan, "The Tenacious and Courageous Jane L. Stanford," Sandstone and Tile, vol. 9, No. 2, Winter 1985, 1-13, p. 11.
- 16. Stanford Daily, October 7, 1952.
- 17. Stanford Daily, May 16, 1958.

C. Stewart Gillmor, '60, is Professor of History and Science at Wesleyan University, Middletown, CT. During the past year, he has been Visiting Professor of Electrical Engineering at Stanford while also working on a biography of Frederick E. Terman. A version of this article was delivered as a Stanford Historical Society talk in January 1999.

Stanford Through the Century

100 YEARS AGO (1899)

Jane Stanford saved the Governor Stanford locomotive—the first engine purchased by the Central Pacific Railroad-from being scrapped, and brought it to campus. Built in 1862 in Philadelphia and transported around Cape Horn the following year, CP No. 1 was named for railroad president and California governor, Leland Stanford. It hauled supplies during construction of the western half of the first transcontinental railroad, but never made it far into the mountains—that duty was left to newer, more powerful engines. Stored on campus in an open field and later covered with a shed, the Governor Stanford in 1916 was moved into the museum's north rotunda, where it remained a popular attraction for 47 years. It is now on long-term loan to the California State Railroad Museum in Sacramento.

Victorious Berkeley students snatched the Stanford Axe following an emotional baseball game in San Francisco. Stanford Yell leader Billy Erb had used the lumberman's axe during the game to hack apart an effigy of a California golden bear. Flush from their baseball

1899 1999

BY CATHERINE C. PECK, '35

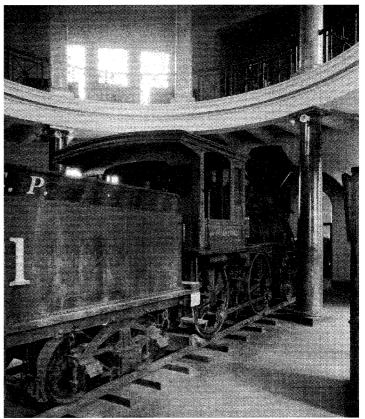
victory, and celebrating conquests in Big Game and a recent debate competition, Cal students led a chase through San Francisco streets, eventually escaping to Berkeley on the ferry. In retaliation, a group of 20 Stanford men soon invaded Berkeley in the middle of the night, making off with the senior fence, delivered to the Farm by horse-drawn

wagon. The Daily Californian declared the fence unsightly, and said Cal was glad to be rid of it. Despite numerous attempts, it would take Stanford men 31 years to recapture the prized axe.

While Mrs. Stanford ambitiously planned new buildings, President David Starr Jordan pleaded to restore faculty salaries, which had been cut 10 percent during the six years of financial and legal turmoil that followed Leland Stanford's death. Jordan also sought money for additional faculty, as well as books, equipment, and other academic needs. Mrs. Stanford granted most of his request, but construction remained her first priority and the two would clash repeatedly on budget issues during the coming years.

STANFORD UNIVERSITY ARCHIVES

Governor Stanford Locomotive on display at the Stanford Museum.



STANFORD UNIVERSITY ARCHIVES



Stanford Through the Century

75 YEARS AGO (1924)

A dinner in the new Union honored five faculty members who were presidents of national scientific societies: President Ray Lyman Wilbur, president of the American Medical Association and of the Association of American Colleges; Edward C. Franklin, president of the American Chemical Society; Harris J. Ryan, president of the American Institute of Electrical Engineers; Lewis M. Terman, president of the American Psychological Association; and Bailey Willis, president of the Seismological Society of America. Toastmaster for the evening was Stanford's first president, David Starr Jordan, himself a former president of several national organizations, including the American Association for the Advancement of Science.



Alvin C. Eurich in his office.

STANFORD UNIVERSITY ARCHIVES

a Reminiscence of the "Fence"

Students celebrate the capture of the Berkeley senior fence.

50 YEARS AGO (1949)

The King of Swing Benny Goodman, and his 18-piece orchestra, accompanied by two vocalists, played in the basketball pavilion for a dressy all-campus dance sponsored by the Cardinals. A line of students formed before dawn to purchase \$1.80-per-couple tickets.

Women voted for a new demerit system to replace lock-ins, fines, and other penalties for lock-out violations of the social code. A woman could be put on social probation after four demerits and suspended after five.

An architectural controversy erupted over the flat roof on the men's dormitory under construction, Lucie Stern Hall. A survey showed that 94 percent of alumni favored Stanford's traditional red-tiled roofs and sandstone-colored buildings. In a letter to the Board of Trustees, the Alumni Association's Executive Board objected to Stern Hall's roofs and its slate gray exterior, and the Alumni Review was bombarded with letters denouncing the design. Trustees declined to modify the blueprints, but said that, to the extent possible, future buildings should harmonize with the original buildings.

Alvin C. Eurich, acting president since the death of Donald B. Tresidder, left in January to head the State University of New York. He presented nearly 2,000 volumes from his personal library to the university before leaving. Clarence H. Faust, dean of humanities and sciences, was appointed acting president pending the arrival of incoming president, J. E. Wallace Sterling.

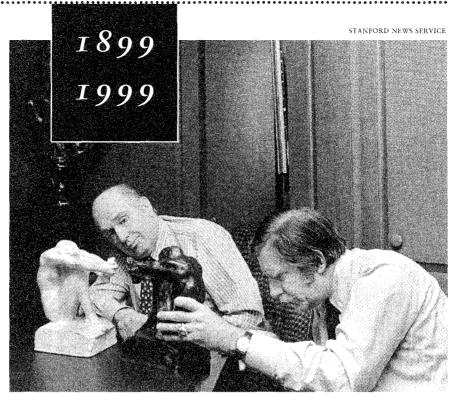
Stanford Through the Century

25 YEARS AGO (1974)

Art patron and investment banker B. Gerald Cantor donated 88 sculptures by French artist Auguste Rodin, along with many Rodin drawings, memorabilia, and the major portion of Cantor's Rodin reference library. With this acquisition, Stanford became the major research center on Rodin in the U.S. The gift resulted from the close relationship between Cantor and Albert Elsen, professor of art history.

Trustees adopted a new land use policy based on reserving the bulk of open land for future academic purposes, rather than for financial return.

For the first time, professors allowed use of **pocket calculators** during exams.



B. Gerald Cantor and Albert Elsen study two casts of Rodin's "Despair."

Obituary

Rosamond Clarke Bacon, widow of professor of mathematics Harold M. Bacon and one of the founders of the Stanford Historical Society, died Jan. 20, 1999, at Sharon Heights Convalescent Hospital in Menlo Park. She was 90.

A resident of one of Stanford's most historic houses, she was affectionately known to generations of students as the "dean of the Lower Row," and was admired for the collection of roses she tended along the circular driveway in front of her white Classical Revival home on Mayfield Avenue.

Feature stories about Ros and her prominent house appeared in the winter 1998 issue of *Sandstone & Tile* (Vol. 22, No. 1).

- By Karen Bartholomew



Rosamond Clarke Bacon (on the car's fender) visits Yosemite with her family in 1918.

STANFORD UNIVERSITY ARCHIVES

Dear Historical Society friends,

As of this issue and with regrets, I've decided to resign as designer and assistant editor of Sandstone & Tile. As we gear up for the reopening of Green Library's West Wing, my job as exhibits designer and coordinator for the Department of Special Collections has become more challenging and time-consuming and promises to continue that way well into the millennium. After checking my Y2K compatibility as well as the coming months' schedule, I realized that something had to give. Joanna McClean, formerly of News and Pubs and Stanford Publication Services, graciously agreed to take on production of this hefty issue on short notice.

In the spring of 1986, when I worked with editors Karen Bartholomew and Rocky Nilan to paste up my first exciting issue of S GT, we waxed type to boards and burned halftones in the News and Pubs darkroom. Only slightly more than a decade later, we're FTPing files over the internet

(hah! there's one for the editor), scanning TIFFS, and swapping zip disks. Technology forced us to learn new methods of production (I should say it offered amazing opportunities), but the value of preserving the historical record remains unchanged.

Many of the publication's most avid readers and valued critics (designers and editors do want to hear what you think, especially if it's nice, and even if it isn't) have passed on, and without naming individuals, I want to honor their memory and contributions here. I think of the 40 issues I've been involved in producing not in terms of ink colors specified, photos scanned, paragraphs reworked or typos corrected (or printed) but in terms of friends made, preservation issues raised, and relationships built. It's been great. Now I'll be an interested and critical reader, along with you.

—Becky Fischbach



P.O. BOX 2328 STANFORD UNIVERSITY STANFORD, CA 94309

Non-Profit Org. U.S. POSTAGE PAID

Palo Alto, CA Permit No. 28