





a Daring Rescue:

Neutra's Kraigher House Returns to Life

The flat roofs, projecting eaves, ribbon windows, and white-washed walls of the George Kraigher House in Brownsville are newly restored after a nearly two-decade preservation effort. The result of the work of community activists, city officials, and the University of Texas, Brownsville/Texas Southmost College, this significant example of early modern architecture—and the city's role in aviation history—is a unique contribution to the larger panorama of the city's built heritage.

by Catherine Gavin

BUILT

in 1937 to the designs of renown architect Richard Neutra (1892-1970) for a Pan

American Airlines pilot, the George Kraigher house was Neutra's first residential design erected outside of California. Neutra, a Viennese immigrant, who moved across the Atlantic with hopes of exploring the possibilities of modern design, settled in Los Angeles in 1925. A prolific writer and one of Southern California's most celebrated residential architects, Neutra designed the Kraigher House during a period when his practice was flourishing. It is the only example of his single-family homes in Texas, and the first International Style house built in the state.

The project was completed for the sum of \$5,000 under the supervision and management of local Brownsville contractor A. W. Neck and architect Frank L. Godwin. Neutra himself did not actually visit the Brownsville site until 1951. "Architecture by remote control" was how he described his limited site supervision of the Miller House construction in Palm Springs in 1937, which also aptly describes his relationship to the Kraigher House job.

Neutra's client, George Kraigher (1891-1984), was a highly successful pilot and Pan American Airways executive who happened to see a Neutra home as he was flying into southern California. He contacted the architect to design a modern house for his new Lower Rio Grande Valley residence. Brownsville, just under an hour's flight from Mexico City and 2,301 air miles from the Panama Canal, opened an aviation gateway to Latin America during the late 1920s. Pan Am leased the airport, changing the name to Brownsville-Pan American Airport in 1929, and established its Western Division headquarters there three years later. Kraigher, the chief pilot and operations manager of the division, perfected instrument flight techniques and land approach patterns on the mountainous air routes south of the border before returning to the northeast in 1946. (He would later commission Neutra again for another home.) Pan Am remained a strong presence in the city until the early 1960s, when it relocated its Western Division headquarters to Miami.

The house, however, deteriorated more quickly than Brownville's place in aviation history. There were two subsequent owners following Kraigher's departure. On his only visit to the house, fourteen years after it was completed, Neutra was upset by cracks in the stucco and unsympathetic changes to the original interior design. The subsequent use of the house as a rental property beginning in the 1970s and encroaching development further advanced its increasing disrepair. Strip malls, restaurants, and



Near collapse after years of neglect, squatting, and water damage, Preservation Texas and the National Trust named the Kraigher House to their "most endangered" list in 2004.

apartments transformed the country landscape, and by the early 1990s, the building was in dire condition and only six acres remained of the once expansive site.

Although the National Trust for Historic Preservation called attention to the plight of the Kraigher House as early as 1992 (as did *Cite* in 1993), it was Ambrosio Villarreal, Jr., the ardent founder of Preservation Brownsville, who took up the cause of saving the Kraigher House in the mid 1990s. Historic

Interior restoration included replication of Masonite built-in furniture.



preservation efforts focused on the conservation of nineteenth-century buildings had enjoyed popular support in the border city since the 1970s. Villarreal set out to educate the public and municipal officials about the value of the Kraigher House. Due to his persistent lobbying and persuasion, the City of Brownsville purchased the house and a third of its six-acre site in 1999 in order to avoid its demolition. A fence was erected to protect the property from

vagrants, yet the house remained untouched. The city's inability to begin rehabilitation led both Preservation Texas and the National Trust to name the Kraigher House to their "most endangered" lists in 2004, again as a result of Villarreal's efforts. In late 2005, the city signed a 99-year lease agreement for the amount of one dollar with the University of Texas, Brownsville/Texas Southmost College, enabling the university to begin restoration. Dr. Juliet V. García, president of UTB/TSC, and Dr. José G. Martín, the university's provost, were instrumental in supporting the rescue of the Kraigher House.

Enter Lawrence V. Lof. Though he is assistant professor of biology at the UTB/TSC, Lof has reinvented himself as a historic building conservator and the university's historic rehabilitation manager. Since 1998, he has restored four historic properties in Brownsville for use by the university. Students were integral to the success and completion of these projects; a Historic Rehabilitation Practicum evolved from this work and now provides students in the Industrial Technology Department hands-on experience with historic restoration construction. Lof recognized that conserving the severely deteriorated house and maintaining the integrity of Neutra's design were no small tasks.

"Every window pane was broken; all of the built-in furniture was stripped; the brass finishes on the windows and the copper pipes were taken and sold by trespassers," says Lof. Prior to the city's acquisition of the property it was used as a shelter by vagrants, numerous fires throughout the 1990s had caused severe damage to the roof. In 2006, when work began, it had been exposed to the elements for seven years, exacerbating the already deteriorated condition.

Because moisture damage to the base of the wood frame was acute, the house's structural shell was being held together largely by the stucco exterior finish. Work began with an emergency structural stabilization and replacement of the partially burned roofs. Lof emphasizes that throughout the process his goal was to follow the Secretary of the Interior's Standards for Rehabilitation and save as much of the original fabric as possible.

"We had to rebuild the roof and all of the interior elements. The structure, steel casement frames, and exterior stucco however are largely the original materials," explains Lof.

Unlike many of Neutra's projects, photographic documentation of the Kraigher House was scarce; the team had one historic image. They were unable to locate the questionnaire Neutra sent to all of his clients, but the letters between Neutra and Kraigher, preserved in the Neutra archives at the University of California, Los Angeles, proved to be invaluable.

"Their correspondence detailed the construction process: from Kraigher's requests for modifications to the original one-story design and his desire to close in the screened porch to the colors and textiles of the interior finishes," says Lof. The documentation answered many of the questions for the team, but did not reveal distinctions between the drawings and the as-built conditions. "We noticed that often Neck made adjustments to maintain the lines, especially in the interior spaces. The windows for example were



Valley Pearl

SITED ON A SIX-ACRE LOT along a resaca, an ox-bow lake, on the northern outskirts of Brownsville, the Kraigher House is a two-story wood frame structure faced with cement stucco. A raised foundation lifts the first floor approximately five feet above the sloping site. The compact L-shaped plan opens to the south and was finished on the interior with Masonite built-in furniture.

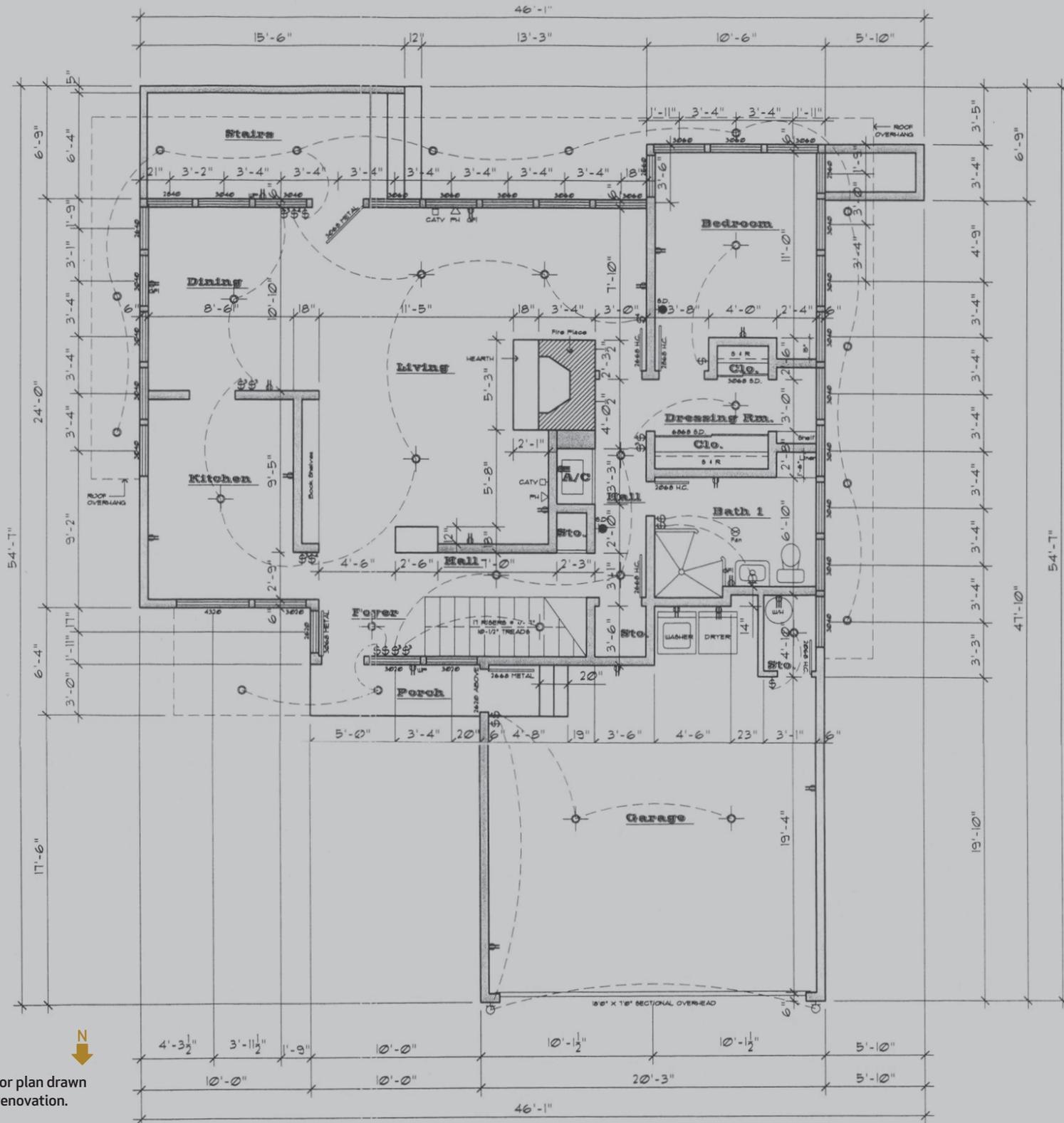
Typical of Neutra's work, the house is positioned to take advantage of the climate and views of the landscape, blurring the boundaries between the interior and exterior while maximizing comfort. The ribbons of casement windows on the first



and second floors open the interior spaces to the Gulf breeze. Passive solar design involves blocking the sun with wide eaves, into which rising heat is pulled through vents. Exterior lighting, recessed in the eaves, creates privacy screens by obscuring evening and nighttime views of the interior of the house while eliminating reflections on the interior.



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First floor plan drawn for the renovation.

larger than all notes stated. We remained true to any of the as-built modifications. With this house, and Neutra in general, it was all about the lines.”

AS is the case with many early and mid-century modern structures, missing materials and hardware are no longer produced. Reconstruction and replacement were required for the roof and ventilation systems, as well as the interior finishes. A manufacturer in Monterrey, Mexico supplied the rolled steel for the replication of the original crimped gutters and a local company formed the breaks to replicate the soffit. Small fragments of the wood louvers for ventilation and the textured glass diffusers of exterior recessed

lighting provided enough information for Lof’s team to rebuild these features. The wood strips in the soffit allow heat to rise up the face of exterior walls approximately two feet to a horizontal screen where the air escapes. This detail, along with the numerous transoms and windows, responded to the humid heat of Brownsville by allowing air to circulate throughout the house, although the rehabilitation added a central air-conditioning system.

“On the interior we were able to replicate the original polished Masonite panels for the built-in furniture and sliding doors where Neutra had originally specified them,” said Lof. “The hardware for the casement windows, however, is no longer produced. We left fixed panes in the casements until

a later date when more resources are available to reproduce the hardware.”

In the bathrooms, the original cast-iron tubs remained, as did some of the white subway tiles. The red paint of the downstairs bathroom and the green finish of the upstairs bathroom walls were both noted in the correspondence. The red interiors of cabinets were also discussed in Neutra’s letters and confirmed by the paint samples taken on site. On the exterior, numerous areas of the stucco were repaired as needed; the entire surface was then painted white, as it had been originally. The steel casement windows were also painted an aluminum color as specified in 1937.

“Lof’s team went to great lengths to find



Lawrence Lof, left, with students from the University of Texas Brownsville, standing under the eaves of the Kraigher House after completion of the renovation in 2008.

Reclad in brick in the 1950s, the original terrazzo-faced fireplace was restored.



manufacturers to reproduce necessary elements,” says Daniel Carey, director of the Fort Worth-based southwest regional office of the National Trust. “They also introduced new materials, and in my opinion, successfully walked a very fine line: on one hand conserving as much as they could of the original, while also updating the building to meet code.”

New York architect Theo Prudon, president of the modernist preservation organization, DoCoMoMo-US, notes that upgrading residences to contemporary standards of comfort and size are primary challenges when preserving early- and mid-twentieth-century houses. Prudon emphasizes that the visual integrity of a design is also key to the conservation of modern buildings.

Lof notes that appreciation for the design and modern materials was an acquired taste for both him and his students. “They were in shock when I explained that we were going to lay linoleum over the beautifully reconstructed oak staircase.” He seems to have brought his training as a scientist to the work, using a forensic approach to preservation, carefully investigating clues and piecing together an understanding of the original design. “As we were working with the interior spaces, we realized that the original terrazzo-faced fireplace had been reclad in brick at some point in the 1950s,” he adds. “It was amazing to see how the lines of the room came together when we removed the non-original material.”

The Kraigher House now has a shiny fresh

appearance; the essence of modernism was, after all, its newness. Lof and the university’s restoration is an important contribution to the conservation of Neutra’s work.

“The Kraigher House is an example of the growing importance of modernism in preservation circles here in Texas,” says Carey. “There are numerous good buildings across the state; many of them are worth saving and people are talking about it.” Carey also notes the importance of public access to the Kraigher House, “It is significant that the building will be adaptively reused and programmed with general access; we want it to be relevant.”

Peter Goodman, director of the city of Brownsville’s Historic Downtown, says, “We had numerous calls from individuals at the beginning of the process hoping to renovate the property for private use. It was not our desire for this significant design to be in private hands.”

The university has not determined how it will use the Kraigher House. Neutra’s own house and studio, the VDL Research House II in Los Angeles, is now owned by California Polytechnic State University, Pomona, which has struggled to raise operating costs for maintaining the house for tours and functions. UTB may use the Kraigher House as part of a new architecture program. Behind the chain link fence the city erected before the restoration to block vagrants, the house now stands shiny and bright. It will soon be open to the public. 🚗



George Kraigher, left, “Arriving from Los Angeles in our first Douglas”.

A Dashing Man

by Stephen Fox

RICHARD NEUTRA’S DESIGN COMPLEMENTED George Kraigher’s sense of adventure. Both men were born in the Austro-Hungarian empire. Kraigher (1891-1984) was from Slovenia and trained as a pilot in the Austro-Hungarian military. In 1915, he defected to Italy and, for the rest of World War I, flew for the Serbian air corps. Immigrating to the US in 1921, he performed aerial survey and mapping work before joining Pan American Airways in 1929. When the company routed all its overland flights between the US and Latin America through Brownsville, the southernmost city in the continental US, Kraigher helped pioneer the routes. In 1937, he set what was then a speed record for commercial flights in a journey that began in Brownsville and, over the course of six days, extended as far south as Santiago, Chile, and Buenos Aires, Argentina, before ending in Rio de Janeiro, Brazil. Kraigher was gregarious and convivial. An accomplished horseman, he entertained in Brownsville, often arranging for friends to fly in from other Texas and Mexican cities served by Pan Am. When the US entered World War II, Kraigher left Brownsville. During the war, working first for Pan Am, then as a military officer (eventually attaining the rank of colonel) under the Office of Special Services, Kraigher used his flying skills and geographic knowledge in support of critical military missions. He charted air routes across Africa, serving supply lines from the US to the Middle East and India in the early 1940s. In the latter part of the war, he was active in the Balkans, organizing and carrying out aerial rescues of downed Allied aviators. Kraigher did not return to Brownsville after the war. He organized air services for Aramco in Saudi Arabia and in the 1950s built a second house designed by Richard Neutra in Litchfield, Connecticut, where he lived until his death.