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Harold and Lillian Bishop were in the market for a new home. The Bishops had lived in two traditional houses since their marriage in 1941, but with a busy job and a new infant on the way, the young couple had tired of the maintenance required by their older wood-frame home. As they explored options, the Bishops came across the Lustron Corporation's advertisements for a new, all-steel house that could be constructed quickly and was virtually maintenance free. In the fall of 1949 the couple toured a model Lustron erected in Scotia, New York. Liking what they saw, the Bishops decided to purchase the unusual house. True to the company's promise, construction was completed in under a month, and the family moved in on November 4.

The Lustron Home, the distinctive, prefabricated, porcelain-enameled steel house, was the invention of businessman and engineer Carl Strandlund. Although only a few thousand were constructed, the Lustron was one of the most heavily subsidized housing initiatives in United States history. Carl Strandlund (1899-1974), born in Sweden and raised in America, came from a family of inventors. From an

early age, Strandlund showed an aptitude for invention and an obsessive desire to see how things worked. He studied engineering through a correspondence school before taking a job at the Minneapolis-Moline Tractor Company, where he created over 150 patents that revolutionized equipment use in the Depression-era farming industry. Over his lifetime Strandlund invented

everything from a wallpaper remover to theater air-conditioning systems.

The name "Lustron" originated with the Chicago Vitreous Enamel Products Company, which specialized in steel enamelware for household appliances. In 1937 the company trademarked the term to refer to the porcelain-enameled steel architectural panels it was creating for storefronts and interior walls. Distinguished by a sleek, glass-like appearance, Lustron was extremely durable and easy to clean. Before World War II, Lustron panels were found on White Castle restaurants and Standard Oil service stations. At

the onset of the war, with steel reserved for the defense industry, Chicago Vitreous ceased producing Lustron panels. Meanwhile, in 1942 Carl Strandlund joined the company, and by September 1943 his success in



Carl G. Strandlund, 1899-1974.

developing improved tank armor that could be manufactured quickly had earned him a promotion to general manager. His contribution to the war effort propelled him into the social circles of Washington's most powerful players.

As the war came to a close, the United States faced a housing crisis of epic proportions. Millions of returning soldiers were marrying and starting families, and the middle class was exiting the nation's cities for the "modern" lifestyle and architecture of the suburbs. Meanwhile the housing industry had been stalled for almost five years. These factors created an unprecedented demand for new housing. When Wilson Wyatt, the former mayor of Louisville, was appointed by Harry Truman to head the Veterans Emergency Housing Program, he set a goal of producing 1.2 million new homes during 1946. Thus when Strandlund approached Wyatt that same year to request release of enough government steel to construct 500 enamel-steel gas stations, he learned that steel was still reserved, now for new housing.

However, the meeting provided Strandlund with an idea that he took back to Chicago Vitreous. What if the company's porcelain-enameled steel panels could be used for mass-produced houses constructed in an automobile-style assembly line? Over the next several months, Strandlund and his designers developed the first Lustron prototype. Returning to Washington with drawings and a manufacturing plan, Strandlund received immediate support from Wyatt, who not only approved Strandlund's request for funding and materials but also promised a wartime assembly plant and a guarantee to cover the cost of the first 15,000 homes produced.

Despite Wyatt's recommendation, Strandlund still had to secure the actual funds from the Reconstruction Finance Corporation (RFC), and by 1947 Chicago Vitreous was developing a working design. The first model was designed by architects Roy Blass and M.H. Beckman. Strandlund instructed them to design a building based on the popular bungalow but constructed entirely of steel and metal components. The Lustron prototype, "The Esquire," featured porcelain-enameled steel exterior walls and aluminum casement windows. The one-story building was rectangular in

plan with a low-pitched gable roof, small cut-out entry porch, and a downspout with zigzag motif (later a Lustron signature). The interior, also clad in Lustron panels, featured a living room, kitchen/dinette, utility room, bathroom, and two bedrooms. What the house lacked in size it made up for with a multitude of space-saving features, including metal pocket doors between rooms and plenty of built-in storage in the kitchen and bedrooms. The house was heated with radiant heat from the ceiling panels. Erected in Hinsdale, Ohio, the prototype generated the interest Strandlund needed to convince the RFC to back his invention.



The first Lustron model being built in midtown Manhattan, 1948.

Nevertheless, considerable negotiations and intervention from Congress were involved before the RFC eventually approved a \$12.5 million loan. It came with the stipulation that Chicago Vitreous would be liable if the Lustron failed. Fearing massive losses, the company parted ways with Strandlund, who used his 86,000 shares of company stock to buy the Lustron trademark, panel patent, and machinery. The new Lustron Corporation was formed on October 31, 1947, converting a former aircraft plant in Columbus, Ohio, into a manufacturing plant. By early 1948 over \$7 million of machinery and equipment had been purchased for the sole purpose of manufacturing Lustron homes.

Before production began, the Lustron Corporation carefully crafted an extensive national marketing campaign targeted toward returning soldiers, housewives, and other American families looking to escape to post-World War II



A group of Lustron Corporation executives and managers outside the company's factory in Columbus, Ohio, c1947-1950. Courtesy Ohio Historical Society.

suburban communities. Strandlund enticed prospective buyers with the slogan: "Lustron: A New Standard for Living." By the time Strandlund began to build 100 model houses across the country, the company had improved the design. The new, modified ranch style "Westchester" had significantly more built-in features, including a kitchen/dinette china cabinet with convenient pass through, an elegant bedroom vanity surrounded by floor-to-ceiling closets, and an innovative combination

clothes and dishwasher manufactured specifically for the company. Buyers could choose a two- or three-bedroom model, with or without the deluxe built-in packages, in dove grey, maize yellow, surf blue, or desert tan. Interior color options were grey, ivory, blue, yellow, and pink. The homes came with magnetized hooks for picture hanging and a brochure detailing required maintenance; each house was assigned a unique serial number. Later the company developed

smaller models, including the "Newport" and the "Meadowbrook"; however, the Westchester remained the company's most popular design. Other later options included garages, breezeways, and carports, and pink or lime green exteriors.

In April 1948 the first Lustron model, furnished and decorated by *McCall's* magazine, was erected at the northeast corner of 52nd Street and the Avenue of Americas in Manhattan. In the sixteen days it was open, more than 60,000 people toured the model. Visitors included government officials from New York, New Jersey, and Connecticut. The *Wall Street Journal*, *New York Times*, *Chicago Tribune*, and other leading newspapers all featured articles on Lustron. Advertisements were run in *Time*, the *Saturday Evening Post*, *Foreign Service*, *Architectural Forum*, and *Banking*. An April 19, 1948, issue of *Life Magazine* contained a two-page Lustron advertisement proclaiming the "New Standard for Living" and including a coupon that readers could submit for more information. This advertisement generated more than 50,000 requests for information. An article in the *Army Times* resulted in an order for more than thirty-five houses for the U.S. Marine Corps base in Quantico,

The New York State Lustron Project

Funded by a Preserve New York grant, the Historic Albany Foundation has embarked on a statewide survey of Lustron houses. Over 100 Lustrons were constructed in New York State, and approximately one-third of the surviving examples are located in the Capital District. The project goal is to locate, record, research, and nominate to the State and National Registers as many as possible. The larger goal is to encourage the preservation of these innovative homes, which, as they age, are increasingly threatened by development pressures or remodeling.

For information about the project contact Historic Albany Foundation at 518-465-0876 or <http://www.historic-albany.org/lustron.html>.



Virginia. Lustron homes were endorsed by *Consumer Reports* and won the approval of Emily Post, who praised the "intelligent planning [that had gone] into this house." At this point, not a single private home had rolled off the assembly line.

The company set up a dealership network with individual contractors, much like the automobile industry. It was the dealer's responsibility to sell, build, aid in the financing process, and service the house after the sale. Theoretically, a shiny new Lustron would be as easy to buy and own as a new Ford or Chevrolet. The company also developed an efficient way to deliver the 3,000 building components to the worksite. A specially designed truck, holding all the parts for a single house, was loaded so that parts could be unpacked in exactly the order in which the house was to be constructed. The elaborately configured fleet cost \$4.5 million dollars; however, the trucks helped to decrease the average construction time to just over two weeks.

The process of fitting out the factory to produce the housing components took nineteen months, and the building was not fully operational until January 1949. The first house was shipped to a St. Louis suburb. By this time, the company had amassed six more high-interest loans from the RFC totaling \$37.5 million dollars and requiring a monthly payment of \$1.25 million. Unfortunately, the Lustron Corporation had spent more time promoting its product than living up to its promises of efficient production and affordable cost. Although the corporation boasted that it could manufacture 100

houses per day, actual daily production never exceeded twenty. Originally promoted at an average price of \$6,500, actual costs soared to over \$10,000, excluding land. The relationship with dealers was consistently strained due to Strandlund's insistence that they pay cash at the factory, putting the liability to sell the houses on the contractors. Mounting protests from building trade unions and lumber and concrete

Strandlund filed for bankruptcy and ultimately lost everything.

Despite the innovative design, efficient production method, and potential appeal to young homeowners, fewer than 2,600 Lustron homes were sold nationwide. More than 100 were shipped to New York State, where they were sold by thirteen Lustron dealerships. The largest number was marketed by dealers serving the Capital District region, with others appearing in the



The Lustron "Westchester" model featured a master bedroom with a built-in vanity and closets. Photograph from original Lustron catalogue.

companies who feared the potential loss of jobs in their industries eroded political support. With the government investigating funding irregularities, the RFC filed foreclosure proceedings in March 1950, and the company ceased production the following month. Between dealer investments and government and private loans, the Lustron Corporation had amassed a debt of over \$50 million (equivalent to more than \$400 billion today). With 236 creditors,

lower Hudson Valley, Long Island, Adirondack, Syracuse, and Binghamton regions, and in the state's westernmost counties. Dealerships, which had to maintain their production schedule in order to profit, were hard hit by the company's failure, and dealers and their investors took an estimated \$50 to \$70 million loss after the plant closed in June 1950. Large orders in New York City and Buffalo were canceled, and many disappointed buyers were left with their orders unfilled.

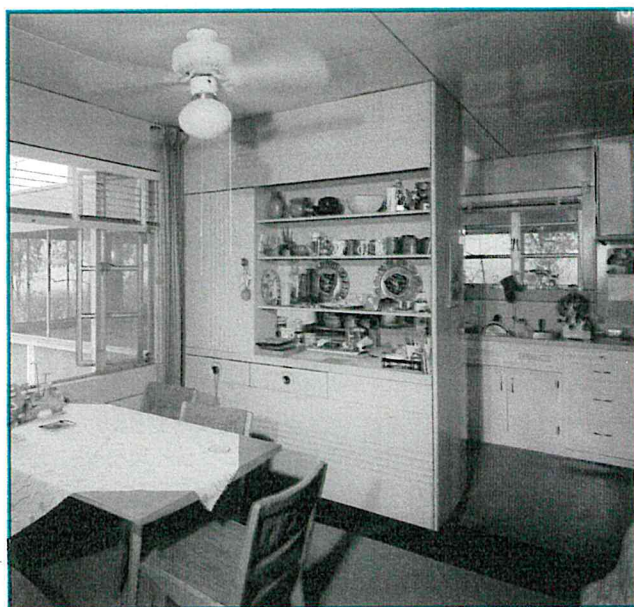


Harold and Lillian Bishops' Lustron house, which they have owned for fifty-nine years.

After nearly sixty years, Harold and Lillian Bishop still live in their Lustron home (Westchester model, Serial No. 01458) in Glenville, New York. Now in their eighties, the couple has done little to change the house. With the exception of a new heating system and replacement of one door, the Lustron survives as built. Among few original Lustron homeowners in New York State, the Bishops have maintained their home exactly as the company instructed, taking care to preserve even the blueprints and original brochure, which are stored in a kitchen drawer. The Bishops' satisfaction with their home suggests that the Lustron Corporation's promise of an enduring, virtually maintenance-free structure was not a marketing gimmick but a design and engineering achievement.

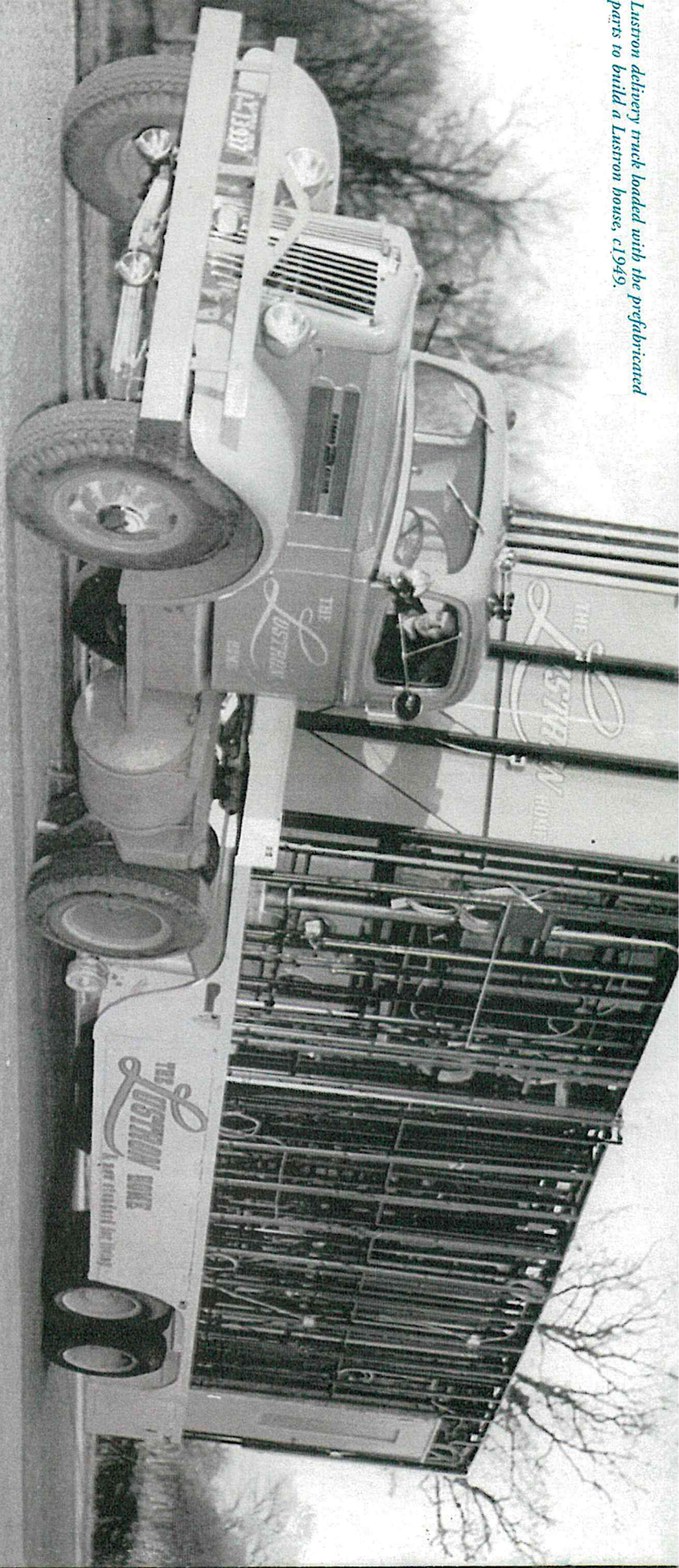
Although some of New York's Lustron houses have been demolished or greatly modified, a new generation of Lustron owners, often drawn to the design's retro-appeal, have united to recognize Strandlund's contribution to mid-twentieth-century residential design and to preserve these dwindling resources. Lacking a contemporary source for parts or contractors trained to repair them, owners have formed an internet community to trade ideas and share their preservation experiences. The Lustron

story provides an insight into the optimism of the post-World War II generation, while the surviving houses document their creator's ingenuity. What was ultimately Carl Strandlund's greatest failure has an enduring legacy through the thoughtful and diligent caretakers of his homes.



A kitchen/dinette china cabinet with pass through was one of the space-saving, built-in features offered in a Lustron. Courtesy Library of Congress.

Lustron delivery truck loaded with the prefabricated parts to build a Lustron house, c1949.



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