

BERNIE'S DOME

Rediscovering Bernard Judge's
Triponent House

BERKAY KARS

SUMMARY OF THE MANUSCRIPT · FOR PUBLICATION

Bernie's Dome

The Triponent House of Bernard Judge & Jeffrey Lindsay

The following is a 32-page summary of a book in preparation for publication in 2028: a complete draft of about forty thousand words in four parts, with about 120 images (licences pending). Every figure and quotation is keyed to an accession number in 340 transcribed documents from the archival records. The author, Berkay Kars, is an architectural designer and researcher in Los Angeles who found the foundations on a Hollywood hillside in 2024 and has spent the two years since gathering the historical, archival, and correspondence record. The book's aim is to bring public attention to a bold experiment of nearly seventy years ago that challenged American housing norms and has never been fully told.

Photographs, drawings, and documents come from the Bernard Judge Papers at UC Santa Barbara, the Jeffrey Lindsay fonds at the University of Calgary, the National Museum of American History, City of Los Angeles building records, and the author's own survey, except where a caption says otherwise. Rights are tracked in the captions; image credits are pending.

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BERKAY KARS · LOS ANGELES

Bernie's Dome · summary of the manuscript, September 2026 · drafts, not for distribution



PRELUDE

Unearthing the Future

THE SITE

2949 Durand Drive,
Beverwood Canyon,
Hollywood Hills

LEGAL

DESCRIPTION

Lot 13, Block 2, Tract 6450

COORDINATES

34°08'09"N, 118°19'12"W

"The Geodesic Dome House was and remains an experimental project in the realm of living."

— BERNARD JUDGE, UNHEADED PROJECT STATEMENT, C. 1961; UCSB COLLECTION 335

The history of Southern California Modernism is conventionally told as a series of beautifully preserved, famous, light-filled glass and steel-framed houses of the Case Study program floating over the hills. These structures are treated as permanent, timeless monuments of post-war optimism, safely isolated from the ravages of time. Yet, despite addressing the same issues alongside its contemporaries, the city's most radical, uncompromising contribution to domestic architecture is not preserved in those glass and steel homes. In fact, it was erased, its final chapter written not by historical preservationists but by the physical and bureaucratic realities of its unlucky demise.

I didn't find this story in those archives; I found it in the dirt on the way to the Hollywood Sign. What started as a passing conversation on the trail with a lifelong canyon resident unfolded into a two-year treasure hunt to uncover one of the city's boldest architectural experiments, one that had long since been forgotten by history. He told me about the "mysterious round foundations" lying dormant on Durand Drive: buried beneath the brush sat a concrete footprint too strange and too precise to belong to a normal house.

When I found the site he pointed me toward, I was welcomed by nothing. There were no signs, no plaques, nothing to indicate what had once occupied this hillside.

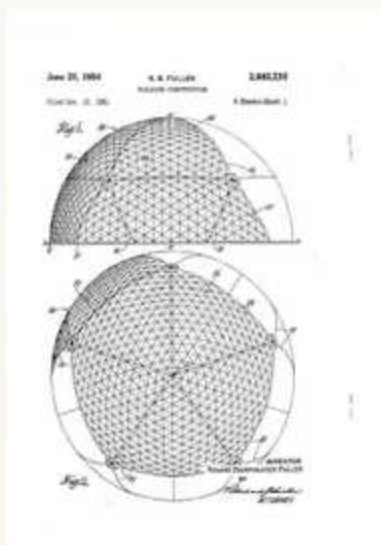
There wasn't even a proper stairway left in the chaparral. So, I climbed. The ascent was steep, forcing me to pull myself up the decomposed granite by roots and branches. Once I finally cleared the brush, I saw it: concrete foundations forming a perfect circular footprint. It was nothing I expected to find. I was suddenly standing inside a quiet, geometric ghost.

From the ground, it felt like standing inside the ghost of a deliberate design. This was no standard flat pad or hillside retaining wall. It was a pure, uninterrupted ring, punctuated by slender concrete piers radiating outward like the hours on a clock face.

What had occupied that hillside was Bernard Judge's Triponent House. Rising during the postwar era just a few ridges east of the iconic Stahl House, it tackled the exact same challenges as the famous Case Study program, how to house people affordably with new, industrial materials, but it answered with an entirely different geometry. It was a geodesic marvel photographed by Julius Shulman, celebrated on magazine covers, and heralded as a radical new frontier for American living. Yet today, despite the international fanfare, the structure has completely vanished, leaving nothing behind but a silent concrete ring waiting to be understood.



1950S
FULLER BEFORE A WOOD DOME FRAME WITH HIS STUDENTS; COLOUR PHOTOGRAPH, DATE, SOURCE AND RIGHTS TO BE CONFIRMED.



1951-54
UNITED STATES PATENT 2,882,215, FILED DECEMBER 12, 1951, GRANTED JUNE 29, 1954. THE SPECIFICATION CITES THE BC278 WEATHERBREAK. LINDSAY IS NOT NAMED. PUBLIC DOMAIN.



1959
FULLER AT SIXTY-FOUR, THE YEAR JUDGE TYPED HIS ACCOUNT OF THE PROJECT. PHOTOGRAPH HANS NAMUTH, NATIONAL PORTRAIT GALLERY, LICENCE REQUIRED.



1949
THE NECKLACE DOME AT BLACK MOUNTAIN COLLEGE, THE FIRST OF FULLER'S DOMES TO STAND. STATE ARCHIVES OF NORTH CAROLINA; RIGHTS TO BE CONFIRMED.



1953
THE STUDIO AS FACTORY: FULLER AND STUDENTS, UNIVERSITY OF OREGON, APRIL 1953. OREGON DIGITAL; LICENCE PENDING.



1955
HELICOPTERS CARRYING A GEODESIC HANGAR, MARINE CORPS TRIALS, QUANTICO, U.S. MARINE CORPS; RIGHTS TO BE CONFIRMED.

THE INVENTOR AND HIS PRODUCT, 1949-1959; FROM THE FIRST DOME TO STAND AT BLACK MOUNTAIN TO A HANGAR THE MARINES COULD FLY AWAY WITH.

1

Before the Experiment

"The discovery of the principle of the Geodesic dome is the first major contribution to structural theory since the Roman Arch."

— BERNARD JUDGE, "THE GEODESIC," TYPESCRIPT, C. 1959; UCSB COLLECTION 33A

In the aftermath of the Second World War, America faced a pressing mathematical problem: millions of servicemen were returning home, and the traditional building industry could not house them fast enough. The war had supercharged the nation's industrial capacity, leaving behind a sprawling infrastructure of aviation factories and aluminum plants. For a vanguard of mid-century designers, the solution was obvious. Peacetime housing should be mass-produced with the hyper-efficiency of an airplane. While programs like the Case Study Houses modernized the residential footprint using standard steel, a more radical movement discarded the right angle altogether. If the ultimate goal was maximum efficiency, the very shape of shelter had to change.

At the center of this structural revolution was Richard Buckminster Fuller. By the 1950s, he was the best-known name in American architecture without having built a house anyone lived in. A relentless provocateur, he argued humanity could only be sheltered by embracing pure geometry. His proposed solution was the geodesic dome: a sphere of interlocking triangles that braces itself, enclosing more volume with less material than any other shape. The first geodesic dome, however, was not his. In 1922, on the roof of the Zeiss optical works in Germany, engineer Walther Bauersfeld raised a test sphere for a planetarium.

When Fuller filed his own patent decades later, the application named neither Bauersfeld nor Zeiss.

What Fuller truly invented was not the geometry itself, but the argument for living inside the shape. An abstract concept, however, could not house a postwar nation without being tested at full scale. Without a factory, Fuller held a patent with no practical way to build it. He found his labor force in the American university system. Transforming college lawns into ad-hoc factories, he mobilized students at schools like Black Mountain College. These disciples cut and color-coded pieces of lumber or aluminum, assembling massive domes in days. The students worked for free; Fuller walked away with full-scale structural testing.

The strategy worked, but not for housing. His patent turned the geometry into a lucrative industrial product. Ford roofed its Dearborn Rotunda with an aluminum lattice, and the military flew domes under helicopters. The geodesic geometry quickly evolved from a campus experiment into an instrument of the Cold War. Yet, a glaring contradiction remained: nobody was actually living in one. The monumental task of translating the dome back into a human-scaled house would not be solved by Fuller. Instead, it would be driven by the disciples who actually drilled the rivets and felt the structural tension with their own hands.

Birth of the “Weatherbreak”

The physical framework of our story was born not in the mild, coastal sun of Southern California but in the sub-zero wind of a field outside Montreal. In December 1950, Jeffrey Lindsay, a twenty-six-year-old industrial designer who had studied under Buckminster Fuller at the Institute of Design in Chicago and now ran the Fuller Research Foundation's Canadian Division from his family's house beside McGill, raised the Weatherbreak. This forty-nine-foot, hubless aluminum sphere, sheathed in a suspended fabric cover, was the first full-scale test of the geodesic idea against a northern winter, and the structure Fuller's own patent would later cite as proof that the invention worked. There was no hub. Lindsay flattened the ends of the aluminum struts, fitted them with stainless steel tongues, and locked each joint with a single bolt. The entire thousand-pound frame packed into a small wooden crate; the Foundation's specification sheet promised it “easily erected by unskilled labor fast (in 45-man-hours).” It went up with a crew of ski friends, and when the shell was finished they climbed it and stood on it for the camera.

Lindsay's structural success positioned him as Fuller's premier Canadian disciple, and he kept building the shape under his own name: the Skybreak, a skinned weekend house on Lake St. Louis, in 1951; a Skigloo at Morin Heights in 1952; a pavilion for the Canadian Armed Forces at Vancouver in 1955. What the record shows of the relationship with Fuller is narrower and colder than a quarrel. Fuller never visited the dome. He called Lindsay's snowfall photograph his “No. 1 Xmas present.” Then his patent, filed on December 12, 1951, cited the structure by its 8C270 designation and used its dimensions as evidence; Lindsay's name is not in the document. The Montreal papers never reported the

dome at all, and when Lindsay first appeared in the Quebec press, in 1952, it was as the inventor of “a tent built inside out.”

By 1956 the Canadian Division had closed, the year the Smithsonian's account states the two men stopped working together. It was a quiet, institutional erasure: the name of the designer who actually built the prototype had slipped out of the paperwork that made it famous. Lindsay had already left. In 1954 he moved to Los Angeles to teach, with a letterhead address on North Sycamore Avenue in Hollywood, and the work followed him: a dome for the Clark Children's Theater at the San Diego Zoo, an arts workshop for UCLA that Life published but that was never built. Weatherbreak did not follow him. It had come down, and by 1956 it was packed away, a bundle of a thousand pounds of aluminum tube sitting in a country its designer no longer lived in.

He had arrived in a city that was rapidly becoming the epicenter of residential modernism, holding the bones of a proven tension skeleton with no site to raise them and no patron bold enough to live inside them.

Meanwhile, a separate ambition was taking root at the University of Southern California, where twenty-five-year-old architecture student Bernard Judge was busy mailing letters to the owners of unbuildable lots to ask what a small dome might cost. Propelled by his own quiet rebellion, Judge would soon seek out Lindsay's discarded aluminum sphere, setting up an unprecedented collision between an orphaned frame and the steep, rugged ridges of the Hollywood Hills.



DECEMBER 1950

BAIE D'URFÉ, QUÉBEC: THE 8C270 WEATHERBREAK IN THE SNOW, THE PHOTOGRAPH THAT WENT IN THE POST TO FULLER. FONDS JEFFREY LINDSAY, CANADIAN ARCHITECTURAL ARCHIVES, UNIVERSITY OF CALGARY, CU2228732; REPRODUCTION REQUEST PENDING.



1950

LINDSAY STANDING INSIDE HIS OWN FRAME. FONDS JEFFREY LINDSAY, CAA; A COMPUTING-FULLER RESEARCH FOUNDATION CREDIT IS ASSERTED BY UQAM. TO BE RESOLVED BEFORE PRESS.



1949

LINDSAY, IN SUGGLASSES, AND FOUR CLASSMATES LIFT THE NECKLACE DOME AT BLACK MOUNTAIN COLLEGE. PHOTOGRAPH MASATO SARAGAWA; STATE ARCHIVES OF NORTH CAROLINA.



1950

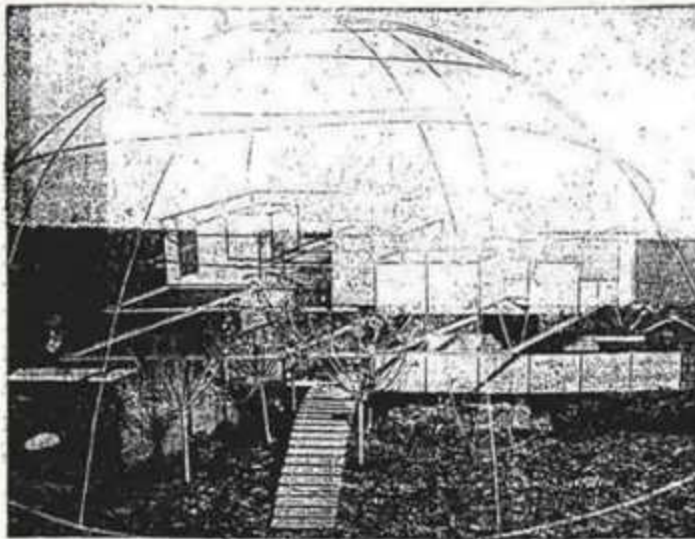
THE CREW ON THE FINISHED SHELL OF WEATHERBREAK, DECEMBER 1950. FONDS JEFFREY LINDSAY, CAA / UQAM CENTRE DE DESIGN; CREDIT UNDER STUDY.



1951

SKYBREAK, BEAUREPAIRE, LAKE ST. LOUIS: THE SAME SHAPE UNDER HIS OWN NAME, SKINNED AND LIT, FILED IN THE FONDS AS A WEEKEND HOUSE. FONDS JEFFREY LINDSAY, CAA.

THE ENGINEER AND HIS FRAME, 1949-1951. BY JUDGE'S ACCOUNT AND THE SMITHSONIAN'S, THE STRUTS IN THE SNOW ARE THE ONES THAT WENT TO LOS ANGELES IN 1957 AND TO WASHINGTON AFTER THAT.



HOME OF 'TOMORROW' — Model shown above is part of project, recently completed by third-year students at School of Architecture at University of Southern California, now being displayed at Harris Hall on the campus from 8 a.m. to 7 p.m. Students completed 11 split-level designs, all utilizing the geodesic dome.

SC Architectural Students Complete Models of Homes

A long look into the future of housing can be taken at the current exhibition in the University of Southern California School of Architecture.

Third-year design students have just completed a project of designing houses utilizing the geodesic dome invented by Buckminster Fuller. Students worked in teams to produce 11 schemes.

Models, plans, and sketches for these houses will be on display in Room 103 of Harris Hall on the SC campus through next week, from 8 a.m. to 7 p.m.

Each of the 11 designs feature multilevel living areas and gardens all under the aluminum and plastic dome, which would have a maximum height of 37 feet at its center.

Third-Year Classes

Associate Professor Calvin C. Straub and Instructor Conrad Buff III assigned the problems to their third-year classes. The projects were completed in two weeks' time.

The problems came about after Carl F. Kraatz, executive manager of the Construction Industries Exposition and Home Show, contacted Dean Arthur B. Gallion of the SC School of Architecture.

Fuller has arranged to ship one of his geodesic domes to Los Angeles for display at this summer's Home Show.

Home Show officials have viewed the students' work and may include some of their ideas in the model home

they will build "under the dome."

The houses are admittedly not a practical project, as many problems remain as yet unsolved, such as lighting, heating, and ventilation.

"We wanted to stimulate creative thinking, argument, and discussion," Buff said.

"The intent was for the students to be visionary."

Fuller's geodesic dome idea has been proving popular. The Army and Navy are using domes as shelters in the Arctic and other places.

2

"...A Special Experimental House"

"Experimental the house was to be, because no one had ever lived in a geodesic dome house before."

— BERNARD JUDGE, JULY 10, 1959

In the summer of 1956, Bernard Judge was a twenty-five-year-old USC architecture student with empty pockets and a radical vision. Engaged to Dora De Larios, a brilliant ceramics student, he wanted a home proving alternative housing could be affordable and harmonious with nature. At USC, geodesic geometry was actively circulating; instructors Calvin Straub and Conrad Buff III were assigning students to design living schemes utilizing Buckminster Fuller's domes. For Judge, building an inexpensive dome was a practical, cheaper alternative to renting.

Lacking a car, Judge relied on his classmate Robert Hallberg to drive him and Dora into the hills to view lots. There, Bernard mapped the terrain, seeking out steep cliffs that traditional developers dismissed as unbuildable. To Bernard, it was the perfect vertical laboratory to prove lightweight framing systems could inhabit extreme topography without destroying it.

On Durand Drive, Bernard spotted Lot 13 of Tract 6450—a near-vertical cliff of decomposed granite. Where others saw a landslide hazard, he saw a vertical laboratory. In December 1956, Bernard sent a check to R.A. Ganahl to complete the \$500 purchase. Hallberg had watched Bernard's obsession with scoffing derision, yet recognizing his friend's design talent, he proposed a fateful alliance in February 1957. Hallberg bought the lot for \$525 and

promised \$3,500 in construction backing. Bernard retained design control, but Hallberg took the deed. This quietly set the legal trap for Bernard's eventual exile before a single spade of dirt was turned.

Securing the dirt was only the first step; Bernard still needed a geodesic frame. He wrote to Buckminster Fuller, but received a cold rejection letter in November 1956 from Fuller's corporation, Synergetics Inc., stating they could not help. Just as the corporate door shut, a backdoor opened. A mutual classmate revealed that Fuller's star Canadian disciple, Jeffrey Lindsay, an engineer who built winter-proof domes in Montreal was living right in Hollywood.

Bernard immediately reached out. Intrigued by the young student's determination to build on a cliff, Lindsay bypassed Fuller's catalog entirely. He offered Bernard an extraordinary deal: a surplus forty-foot aluminum Weatherbreak frame stored in Canada for free, provided Bernard could arrange its transport to Los Angeles.

The bones of the prototype were officially Bernard's to claim. But getting a thousand pounds of structural aluminum across an international border and up a vertical Hollywood hillside required a miracle—a Christmas gift that would arrive packed inside a single wooden box.

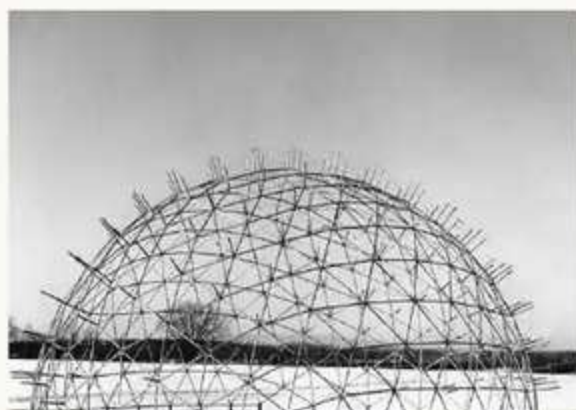
LOS ANGELES TIMES, MARCH 24, 1957: "SC ARCHITECTURAL STUDENTS COMPLETE MODELS OF HOMES." A DOME HOUSE MODEL FROM THE STRAUB AND BUFF STUDIO AT USC. THE WINTER JUDGE WAS DESIGNING TO LINDSAY'S DIMENSIONS. CALVIN STRAUB AND CONRAD BUFF III WOULD COMPLETE CASE STUDY HOUSE 20 IN ALTADENA THE FOLLOWING YEAR. CLIPPING: LICENCE LA TIMES.



WEATHERBREAK FROM THE ROAD THROUGH THE BIRCHES, BAIE-D'URFÉ, DECEMBER 1950. FORDS JEFFREY LINDSAY, CANADIAN ARCHITECTURAL ARCHIVES, UNIVERSITY OF CALGARY.



THE BACK OF A 1959 PRINT OF LINDSAY'S CLARK CHILDREN'S THEATER DOME, STAMPED WITH HIS HOLLYWOOD ADDRESS ON NORTH SYCAMORE AVENUE. THE CONSULTANT JUDGE WENT TO FORDS JEFFREY LINDSAY, CAA.



BAIE-D'URFÉ, QUEBEC, DECEMBER 1950. WEATHERBREAK IN THE SNOW. UNIVERSITY OF CALGARY CU2228732; REPRODUCTION REQUEST PENDING.

3

The Perfect Christmas Gift

"He had a surplus dome in Canada which I could have for nothing if I brought it down and used it."

— BERNARD JUDGE, "THE GEODESIC DOME HOUSE PROJECT," JULY 30, 1958

The skeleton of the Triponent House arrived in Los Angeles packed inside a single wooden box. It was a paradox: a forty-foot spherical armature, capable of enclosing two thousand five hundred square feet of space, compressed into a crate measuring just two by four by five feet. Inside lay a thousand pounds of spidery aluminum tubing. For Bernard Judge, this was the transition from a cardboard studio model to metallic reality.

Engineer Jeffrey Lindsay had relocated to Hollywood to consult from North Sycamore Avenue. Having severed ties with Buckminster Fuller over patent disputes, Lindsay was eager to see his independent joint-engineering validated. When Bernard asked about fabricating a wood dome, Lindsay offered an extraordinary alternative: he could have the surplus Canadian Weatherbreak frame for free, provided he shipped it down as a prototype. Lindsay's blueprints declared: "Dome by Lindsay; Home by Judge." It was a partnership forged in mutual defiance—Lindsay bypassing Fuller's shadow, and Bernard bypassing the rigid Case Study program.

The project's legal tragedy was quietly sown in the freight ledger. To get the frame across the border, Bernard paid the shipping fees, which were reimbursed by his financial sponsor, Bob Hallberg. The check was for exactly \$280.00. This casual transaction became the original sin of their partnership. Hallberg would later

weaponize this receipt in court to argue he had outright purchased, and therefore solely owned, the physical bones of the house.

Unaware of the trap, Bernard pitched his dome to DuPont as an advertising vehicle for their experimental Mylar. But before hauling materials up Durand Drive, the frame required a dress rehearsal. In early 1958, Lindsay borrowed the skeleton for a Mojave Desert trial. Under a blazing sun, Bernard and twenty USC classmates unpacked the crate, and the frame rose from the sand in a single afternoon.

The trial proved the Weatherbreak could conquer the elements. But bringing this sphere back to the Hollywood Hills meant facing a force far more hostile than Canadian cold or desert wind: the entrenched bureaucracy of the Los Angeles Department of Building and Safety. City inspectors had never encountered a residence devoid of right angles, let alone one intending to be wrapped in transparent plastic. To the skeptical zoning board, Lindsay's delicate aluminum web looked less like a permitted single-family home and more like a crashed satellite. Securing the permits would require Bernard to translate pure geodesic geometry into the rectilinear language of the building code.



CONCRETE BLOCK STACKED AT THE CUT, THE CANYON BEYOND; COLOUR SLIDE, JUDGE PAPERS, UCSB ADC 335. SCAN TO ORDER.



A TRIPOD MOUNT ON THE GRADED PAD, THE CUT WALL BEHIND IT; PRINT IN THE JUDGE PAPERS, UCSB ADC 335. IDENTIFICATION TENTATIVE. REPRODUCED FROM A SCAN; ORIGINAL PRINT TO BE LOCATED.



JUDGE'S MODEL OF THE DOME, CARRIED UP TO THE LOT AND PHOTOGRAPHED ON THE SLOPE, THE CANYON BELOW; BLACK-AND-WHITE PRINT, JUDGE PAPERS, UCSB ADC 335 (EXTRACT); SCAN TO ORDER.

4

Chasing the Permit

"Mylar is not, however, an approved plastic in Los Angeles. This is because no one has ever tried to have it approved I am told."

— BERNARD JUDGE TO E. E. DU PONT DE NEMOURS, DECEMBER 28, 1957.

In the spring of 1958, Bernard Judge confronted an adversary that threatened to derail his visionary architectural project before a single piece of aluminum could be assembled: the Los Angeles Department of Building and Safety. Judge's design for the Triponent House—an unconventional, lightweight aluminum sphere enveloped in experimental Mylar film—was fundamentally incompatible with the city's rigid building codes. These regulations had been crafted to govern traditional construction, not the space-age geodesic structures Judge sought to pioneer. The clash between innovative architectural theory and dogmatic bureaucratic procedure was intense.

The Department viewed the extreme lightness of the Mylar-sheathed dome with profound skepticism, questioning its basic structural integrity and its viability as a permanent dwelling. Judge spent weeks engaged in exhaustive negotiations, translating his cutting-edge engineering principles into a language inspectors could accept. One primary battleground was the site's steep topography. Standard regulations mandated the use of continuous concrete foundations, an approach that would have been ecologically destructive to the hillside. Through persistent advocacy and rigorous structural calculations, Judge brokered a crucial compromise. The city agreed to the use of radial concrete piers—a far less

invasive foundational system that anchored the structure while allowing the natural grade to remain completely undisturbed.

The negotiations soon devolved into granular disputes over domestic interior designs and the unconventional spatial arrangements of the home. Inspectors scrutinized everything from the lack of traditional interior load-bearing walls to the routing of standard utilities within a spherical envelope. Furthermore, the city imposed strict local wildlife protection measures, necessitating the integration of mandated rodent barriers. This requirement was meant to prevent fauna from infiltrating the exposed underbelly of the open-plan dome, adding technical difficulty to the process.

Despite the seemingly endless stream of red tape and blueprint revisions, Judge's unwavering perseverance eventually wore down the institutional resistance. After months of painstaking deliberation to satisfy the overseers, the administrative stalemate broke in his favor. This chapter of bureaucratic purgatory concluded with a monumental victory: the official issuance of Permit LA 6184. With that document, Judge was legally authorized to begin construction on his dome.



THE TRENCH AND THE BLOCK RETAINING WALL AT THE CUT. THE FRAME STANDING ABOVE. BLACK-AND-WHITE, UNDATED, 1958-59; ENHANCED (UPSCALED) FROM THE JUDGE PAPERS FRAME. UCSB ADC 335; SCAN TO ORDER.

5

Construction Begins

"A 50 ft. diameter aluminum dome can be put up in one afternoon by a handful of seven year old boys."

— BERNARD JUDGE, "THE GEODESIC," UNDATED STATEMENT, C. 1959

In the dry, late autumn of 1958, the silence of Beachwood Canyon was shattered by the roaring diesel engine of a massive crane. Bernard Judge's paper battle with Los Angeles was over; the physical war to conquer the vertical grade of Lot 13 had begun. To pour wet concrete into radial pier holes carved into the hillside, Judge hired the Owl Truck & Construction Company. The crane crew charged a premium \$27.50 per hour—a small fortune that devoured the fragile, student-built budget. As the heavy steel boom swung over the dusty slope of Durand Drive, hoisting concrete above the cliff, the scene felt heavily industrial and transactional.

Once the concrete piers cured and the gopher-excluding transite sheets were embedded in their slots, the heavy machinery departed. The site was instantly reclaimed by a completely different kind of physical energy. In a scene reminiscent of a utopian barn raising, over a dozen of Judge's USC classmates arrived on the ridge to volunteer their labor. Bypassing commercial contractors, the students scaled the bare aluminum geodesic framework barefoot and without safety harnesses.

The canyon air filled with the sharp, metallic clinking of 6061-T6 aluminum tubes and the rhythmic clatter of ratchets. Operating under the sun, the students hand-tightened the high-strength shear bolts through Jeffrey

Lindsay's flattened tube ends. To neighborhood residents watching from the winding asphalt below, it looked like a high-wire performance. A spidery, mathematical sphere measuring forty feet in diameter was rising to crown the Hollywood Hills.

Among the day laborers Judge hired to shovel dirt and handle concrete on the slope was a quiet young man named Hendrik 'Hank' de Kanter. He was not an architect or a student, but a physical helper collecting his daily wages. At the time, his presence on the ridge seemed entirely inconsequential. Judge had no way of knowing this laborer was quietly observing the project's financial vulnerabilities, preparing to execute a devastating legal squeeze-out once the house was built.

But in the summer of 1959, such cynical legal dangers remained far on the horizon. The skeleton stood fully completed, a glistening geometric crown overlooking the Los Angeles basin. Yet, municipal inspectors remained deeply alarmed by its lightweight appearance. Before they would grant a permit for anyone to sleep inside the transparent Mylar bubble, the city demanded empirical proof of structural safety—leading directly to a high-stakes trial by water.



THE FRAME RISING OVER THE BLOCK WALL, FABRIC HUNG AGAINST THE SUN, TWO FIGURES AT THE BASE. BLACK-AND-WHITE PRINT, UNDATED. JUDGE PAPERS, UCSB ADC 335, PHOTOGRAPHED IN THE READING ROOM.



CLOCKWISE FROM TOP LEFT: STUDENTS ON THE SCAFFOLD INSIDE THE FRAME, THE PLATFORMS GOING IN; A BUILDER BOLTING A JOINT ON THE LATTICE, THE CANYON AND THE HILLS BEHIND (ENHANCED, UPSCALED); A VERTEX AGAINST THE SKY, SPRIT AND CABLE; THE FIRST PANELS OF SKIN GOING ON. BLACK-AND-WHITE PRINTS, UNDATED, 1958-61. JUDGE PAPERS, UCSB ADC 335, PHOTOGRAPHED IN THE READING ROOM.



THE BARE FRAME ON ITS RIDGE SEEN FROM THE CANYON BELOW, THE TRIPOD HOIST RESIDE IT. ENHANCED (UPSCALED) FROM THE JUDGE PAPERS FRAME. UCSB ADC 335; SCAN TO ORDER.



CLOCKWISE FROM TOP LEFT: THE CREW INSIDE THE FRAME, A GROUP PORTRAIT ON THE PLATFORM (READING-ROOM CAPTURE); FIGURES CLIMBING THE LATTICE, BENEATH A HUNG PANEL OF SKIN; THE FIRST PANELS OF SKIN STRETCHED OVER THE STRUTS, CLOSE; A MAN STANDING ON THE CROWN OF THE BARE FRAME, THE HILLS BEHIND. BLACK-AND-WHITE, 1958-61; THE THREE CONTACT-SHEET FRAMES ENHANCED (UPSCALED). JUDGE PAPERS, UCSB ADC 335; SCAN TO ORDER.

July 10, 1959

A year after the permit, with the aluminum frame standing on its piers and still unfinished, Bernard Judge typed a nine-page history, "The Geodesic Dome House Project," dated July 10, 1959, for his attorney. Setting out his intent, he wrote: "It was not to be a conventional house but rather an experimental research project. I was interested in finding out the following things."

Four questions followed, reading like an architectural thesis: whether a dome could be permitted in Los Angeles; the psychological aspects of inhabiting it; the reality of building with unprecedented technology; and its potential cost at varying scales of production.

Then came a new heading in the same typewriter: "Mr. Hallberg added to this list: 1. Would a bank loan money on such a house." This fifth question belonged solely to the financier, acting as a strict condition on his funding. If a bank refused to finance the experimental structure, Hallberg would be relieved of his obligation.

Judge's four theoretical inquiries were painstakingly answered over the next three years by city load tests, the Mylar installation, and his eventual residency. The fifth was answered twice, both times no: Hallberg "still got no loan," and in June 1962 the third owner wrote that "a mortgage on the house is impossible."

1

Can one build a geodesic dome house in Los Angeles. Will the building department allow it.

ANSWERED IN PART I - THE TRANSFER

2

Once built can one live in it. What are the psychological aspects of living in such a house.

ANSWERED IN PART III - THE ICON

3

What happens when one tries to build a house using the best technology available today. Without regard to conventional living habits.

ANSWERED IN PART II - THE EXPERIMENT

4

What cost would such a house represent in terms of a) a prototype b) a custom house c) a mass produced house.

ANSWERED IN PART IV - THE RECOVERY

5

Would a bank loan money on such a house.

ADDED BY ROBERT HALLBERG - ANSWERED IN PART IV

6

Trial by Water

"The building inspector thought that if a wind blew hard enough, the whole thing would take off like a giant kite. We had to prove him wrong with pure water."

— BERNARD JUDGE

On the freezing morning of January 12, 1960, a small crowd of anxious USC students and skeptical municipal building inspectors gathered on the steep ridge of Durand Drive. The aluminum skeleton of the Triponent House stood completed, a delicate geometric crown overlooking the Los Angeles basin. However, the city was terrified. To inspectors trained on heavy post-and-beam timber frames, Bernard Judge's lightweight space-frame looked like a structural hazard destined to collapse under the first high-velocity canyon wind. Before they would grant an occupancy permit, the Department of Building and Safety demanded brutal, empirical proof of safety: hang 28,200 pounds of water directly from the frame for twenty-four continuous hours.

Judge suspended dozens of large vinyl bladders from the aluminum framework, slowly filling them with water pumped up from the canyon. This was the weight of several municipal water trucks hanging from a frame that weighed only one thousand pounds. Jeffrey Lindsay's hubless jointing system—utilizing flattened tube ends of 6061-T6 aluminum fitted with stainless steel tongues—and Judge's network of slender aircraft-grade tension stays had to distribute the massive stress. If a single swaged Nicopress fitting slipped, the entire dome would collapse in a spectacular chain reaction of metal and water. For twenty-four agonizing hours, the silence of the ridge was

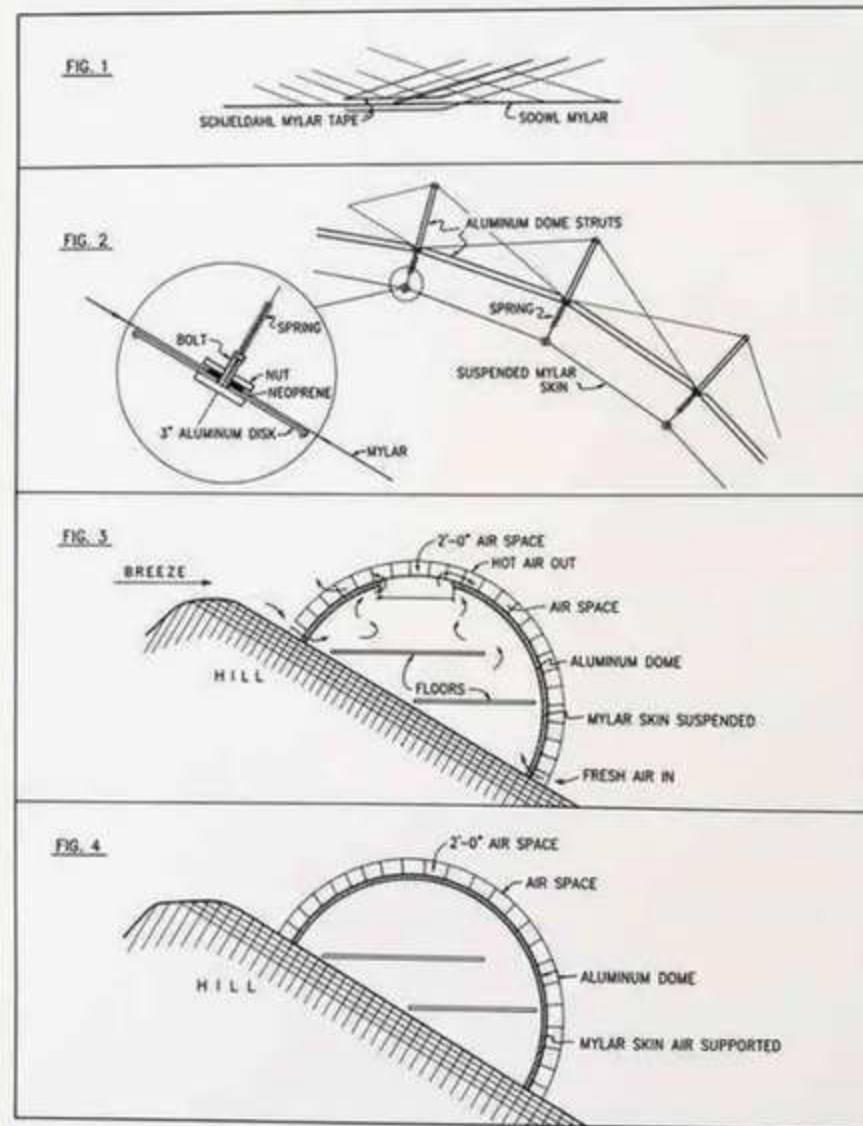
punctuated only by the structural groans of metal settling. Yet, when the inspectors measured the deflection, the results were astonishing. The dome deflected a maximum of only 0.381 inches—well below the city's strict half-inch failure threshold.

With the engineering validated and inspectors silenced, the spidery skeleton was finally cleared to receive its skin and core. Throughout the remainder of 1960, the site became a workshop of intense material craft. Judge and his team systematically patterned, cut, and heat-taped fifteen identical, triangular panels of experimental transparent DuPont Mylar. To hold the plastic skin tight against the buffeting canyon winds, they stretched it over the exterior and laced it down using aircraft cables.

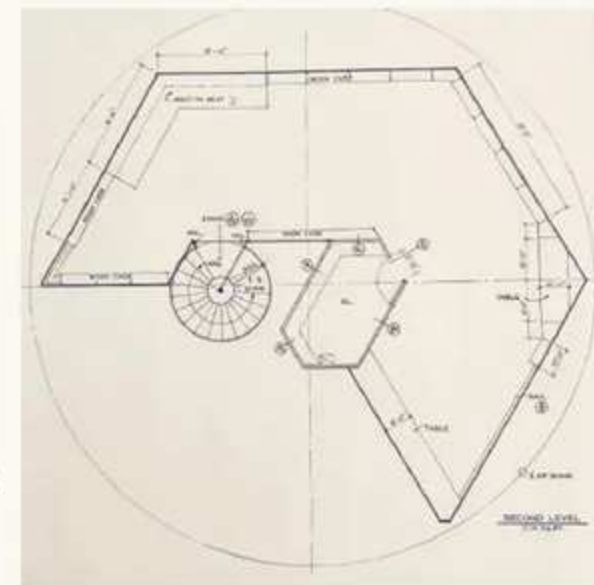
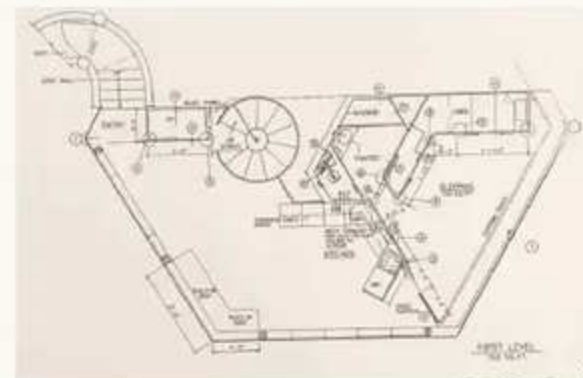
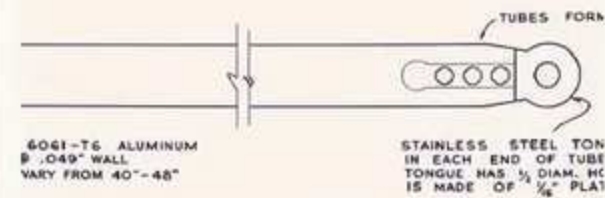
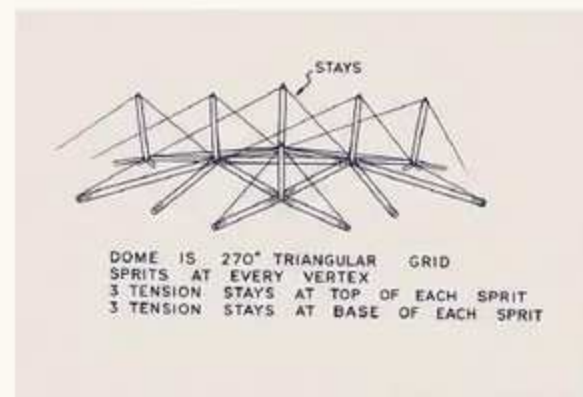
Inside the sealed plastic bubble, they constructed the home's functional heart: a central, circular utility column that housed the plumbing, kitchen, and bathroom. Radiating outward from this central core, they built a two-story floating hexagonal timber deck, providing 1,330 square feet of elevated living space. The cold, mathematical skeleton was replaced by a sealed, warm, and functional thermodynamic sanctuary. By the spring of 1961, the physical trial was over. The transparent bubble stood complete and glittering under the California sun, ready for Judge to finally cross the threshold and begin the daily experiment in future living.



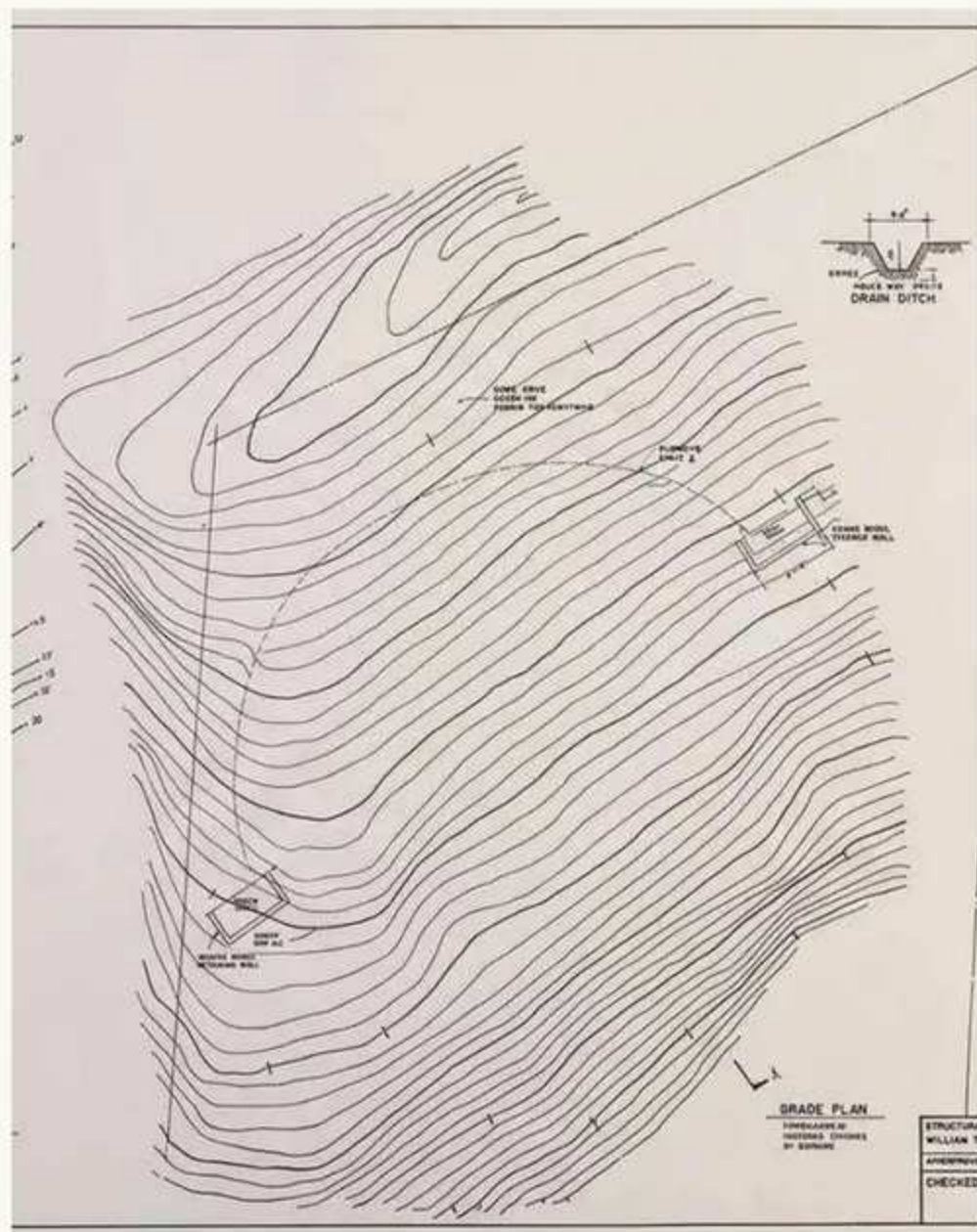
JUDGE'S COLOURED PERSPECTIVE OF THE DOME ON ITS HILLSIDE: THE SUNSHADE OVER THE CROWN, THE TWO DECKS AND THE SPIRAL STAIRS INSIDE THE SKIN, THE STEPS CLIMBING THE SLOPE. COLOURED PENCIL AND INK, UNDATED. JUDGE PAPERS, UCSB ADC 335. FLAT FILE (LAKE-335-FFB-0013); REPRODUCED FROM A CLEANED WORKING COPY, ORIGINAL TO BE SCANNED.



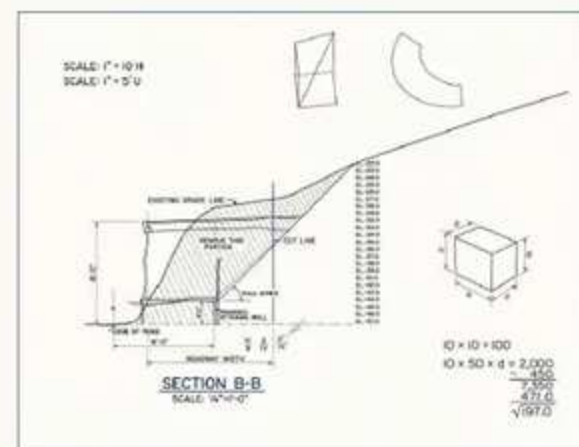
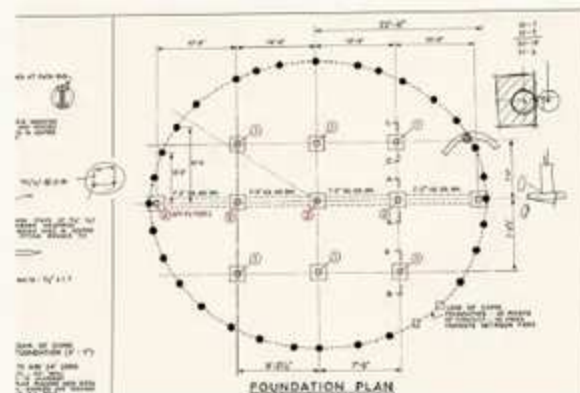
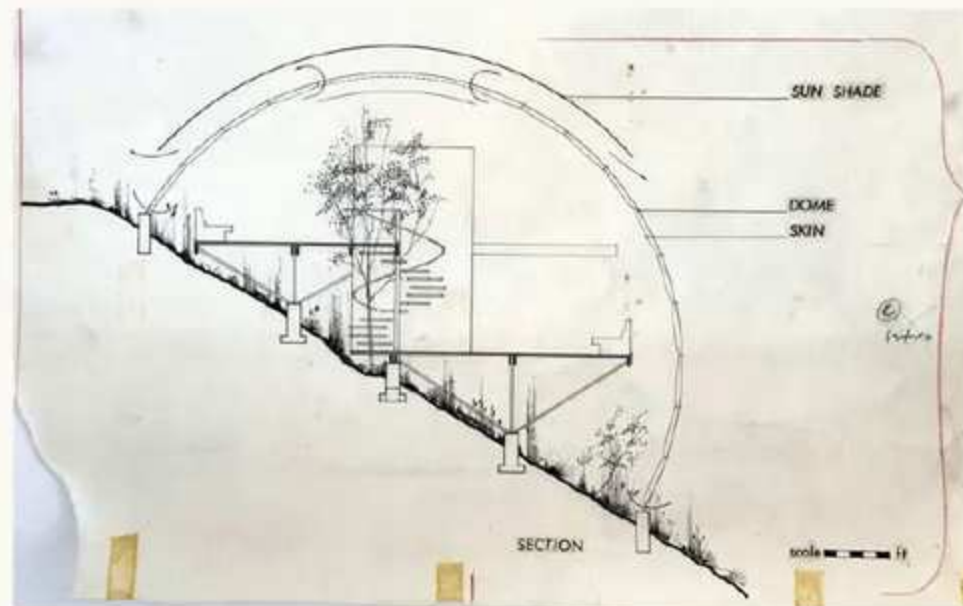
THE MYLAR SKIN, FIGURES 1 THROUGH 4: THE FILM SUSPENDED INSIDE THE STRUTS, THE SPRING, BOLT, NUT AND NEOPRENE AT EACH NODE. THE SUNSHADE OVER IT. JUDGE PAPERS, UCSB ADC 315.



CLOCKWISE FROM TOP LEFT: THE TENSION STAYS, THREE AT THE TOP AND THREE AT THE BASE OF EVERY SPRIT ON THE 270-DEGREE GRID; THE STANDARD TUBE, 6061-T6, .049 WALL, FLATTENED ENDS AND STAINLESS TONGUE; SECOND-LEVEL PLAN, FIRST-LEVEL PLAN, 793 SQUARE FEET, THE SPIRAL STAIR ON THE CORE. SHEETS FROM THE JUDGE PAPERS, UCSB ADC 315; THE TWO PLANS ARE WORKING COPIES. PROVENANCE TO BE CONFIRMED BEFORE PRINT.



THE GRADE PLAN, SHEET 1: THE DOME SET ON THE CONTOURS OF LOT 13, THE CUT AND THE DRAINAGE DITCH MARKED. CLEANED WORKING COPY OF THE UCSB SHEET (LEVELS AND CLEANUP ONLY; CHECK AGAINST THE ORIGINAL BEFORE PRINT). JUDGE PAPERS, UCSB ADC 335; SCAN TO ORDER.



CLOCKWISE FROM TOP: THE PRESENTATION SECTION ON THE SLOPE, SUNSHADE, DOME SKIN, FIRST LEVEL AND THE TREE KEPT, INK ON VELLUM; SECTION B-B THROUGH THE CUT, THE ROADWAY AND THE EXISTING GRADE LINE; THE FOUNDATION PLAN, THE RING OF PIERS AND THE TRANSIT BETWEEN. THE TWO LOWER PLATES ARE GEMINI-CLEANED RENDERINGS OF THE UCSB SHEETS, FOR READING ONLY — THE ORIGINALS GO TO PRINT. JUDGE PAPERS, UCSB ADC 335; SCAN TO ORDER.



THE SPIRAL STAIR ON THE CORE, THE CABINET WALL, THE PLANTING, THE SKIN GLOWING ABOVE. JULIUS SHULMAN, SPRING 1962, JOB 3378, FRAME 13K. GETTY RESEARCH INSTITUTE, LICENSE REQUIRED.

7

Living in the Future

"A house is in fact not only a place, it is an experience."

— BERNARD JUDGE, DRAFT ARTICLE, NOVEMBER 21, 1962

In mid-1961, Bernard Judge and his wife crossed the threshold of the Triponent House to begin one of the most radical domestic experiments in California history. For the next several months, the newlyweds lived inside a transparent forty-foot bubble suspended over a Beachwood Canyon cliff. The reality inside was demanding and physically intense. Living beneath a five-mil weatherable DuPont Mylar envelope meant existing in direct communion with the environment. The transparent skin dissolved all visual boundaries between the domestic interior and the open sky, creating a disorienting psychological impact. At night, they fell asleep with the stars revolving directly overhead; by day, they were completely exposed to the elements, the sun, and the gaze of neighbors on the surrounding ridges.

Because the dome bypassed traditional conventions, there were no interior doors, load-bearing walls, or private rooms. All spatial divisions were organized by the floating levels of the central hexagonal timber deck. This total lack of auditory or visual barriers turned daily life into a shared, collective performance. The dome was also a thermodynamic laboratory. Rather than relying on mechanical climate control, Bernard used the project to study the economic and physical viability of the geodesic envelope. During the height of the summer day, the dome behaved like a greenhouse, accumulating intense heat that

required opening the central ventilating dampers. Conversely, when the cold canyon winds swept down from the ridges at night, the thin Mylar envelope offered little thermal insulation, forcing the couple to adapt to the cycles of the hillside.

Bernard's engineering was rescued from sterility by the artistic partnership of his wife, Dora De Larios. The home's interior became a physical conversation between two distinct material worlds: Bernard's cold, industrial, transparent Mylar shell and Dora's warm, textured, primitive stoneware clay sculptures. Resting on the wooden decks, her earthy, hand-formed ceramic figures grounded the space-age bubble, transforming a mathematical test site into a deeply humanistic domestic sanctuary.

Yet, this glowing, transparent bubble high in the hills was too spectacular to remain a private experiment. As the sun set and the interior lights were switched on, the dome transformed into a brilliant, translucent lantern suspended over the canyon. By late 1961, this space-age beacon began to attract the attention of the outside world, drawing the lenses of architectural photographers and filmmakers who sought the icon of California's futuristic modernism.



BERNARD JUDGE INSIDE THE DOME, THE KITCHEN CORE AND THE SKIN BEHIND HIM; COLOUR PHOTOGRAPH, C. 1961-62, SOURCE AND RIGHTS TO BE CONFIRMED.



CLOCKWISE FROM TOP: THE LIVING DECK, SOFA, ROUND TABLE AND RUG, THE CITY THROUGH THE SKIN (JUDGE PAPERS, UCSB ADC 335); THE KITCHEN CORE AND THE SUNSHADE ABOVE (JULIUS SHULMAN, 1962, JOB 3379, FRAME 11K, GETTY RESEARCH INSTITUTE; LICENCE REQUIRED); THE LIVING DECK FROM THE STAIR SIDE, A SECOND COLOUR PRINT, C. 1961-62 (JUDGE PAPERS, UCSB ADC 335).



LOOKING UP THE SPIRAL STAIR, IN COLOUR, JULIUS SHULMAN, 1962, JOB 3378, FRAME K; GETTY RESEARCH INSTITUTE; LICENCE REQUIRED.



ABOVE: LOOKING UP AT THE MEMBRANE, THE MYLAR PANELS AND THEIR SEAMS AGAINST THE LIGHT (FRAME 18K). BELOW: THE SPIRAL STAIR ON THE CORE, THE CABINET WALL, THE PLANTING (FRAME 13K). JULIUS SHULMAN, 1962, JOB 3378, GETTY RESEARCH INSTITUTE; LICENCE REQUIRED.

8

The Accidental Icon

"LIFE will do a story on the house if we keep things under wraps until completely finished."

— BERNARD JUDGE TO FRANK CAMARD, BETCHUM, MACLEOD & GROVE, NEW YORK, APRIL 14, 1961

In June 1960, the unfinished aluminum skeleton was thrust into the national spotlight by serendipity. LIFE magazine photographer Ralph Crane was navigating the winding dirt roads of the Hollywood Hills, en route to photograph the author Aldous Huxley, when he caught sight of the bare, geodesic frame perched precariously on a raw hillside cut. Crane's photograph altered the project's trajectory. When LIFE ran the image, declaring it a "home of tomorrow," the dome became an overnight sensation.

This premature exposure, however, brought as much tension as it did acclaim. The brief caption that accompanied the photograph inadvertently ignited a bitter, multi-year dispute over authorship and ownership. Jeffrey Lindsay insisted proper attribution should delineate their roles—"Dome by Lindsay, Home by Judge"—while financial patron Hendrik de Kanter fumed over being omitted from the national press. Bernard suddenly found himself acting as a frantic publicist, desperately wrangling a runaway narrative. He spent the following year writing New York PR agents, begging them to suppress outdated photographs to protect a fragile promise: LIFE would only return to shoot the finished interior if kept entirely under wraps.

Behind the management of magazine spreads, the day-to-day reality of the Triponcent House was defined by a gritty, desperate hustle. The soaring, space-age vision

celebrated by the press masked a severe financial drought that threatened to leave the dome permanently unfinished. Every scrap of publicity became a potential lifeline, a means to scrounge the capital necessary to keep building.

This financial desperation reached its peak in October 1961, when an Italian production company approached Judge to use the half-finished dome as a futuristic backdrop for Franco Rossi's film, *Smog*. The filmmakers were mesmerized by the structure's aesthetic, seeing it as the ultimate symbol of Los Angeles's bizarre, alienating modernity. For Judge, however, the film shoot wasn't about cinematic prestige; it was a matter of sheer survival.

The production paid a location rental fee of five hundred dollars—three hundred to the project, and two hundred directly to Judge. That modest sum from the Italian film crew was immediately repurposed, entirely spent on purchasing the wood required to build out the interior partition walls. The glittering, space-age icon was, in truth, being funded piece by piece through sheer commercial opportunism, a hustle beneath the veneer of a mid-century myth.

LIFE
June 1960: "THIS SPIDERY SPHERE, a bold home of tomorrow"

PHOTOGRAPHED BY
Ralph Crane

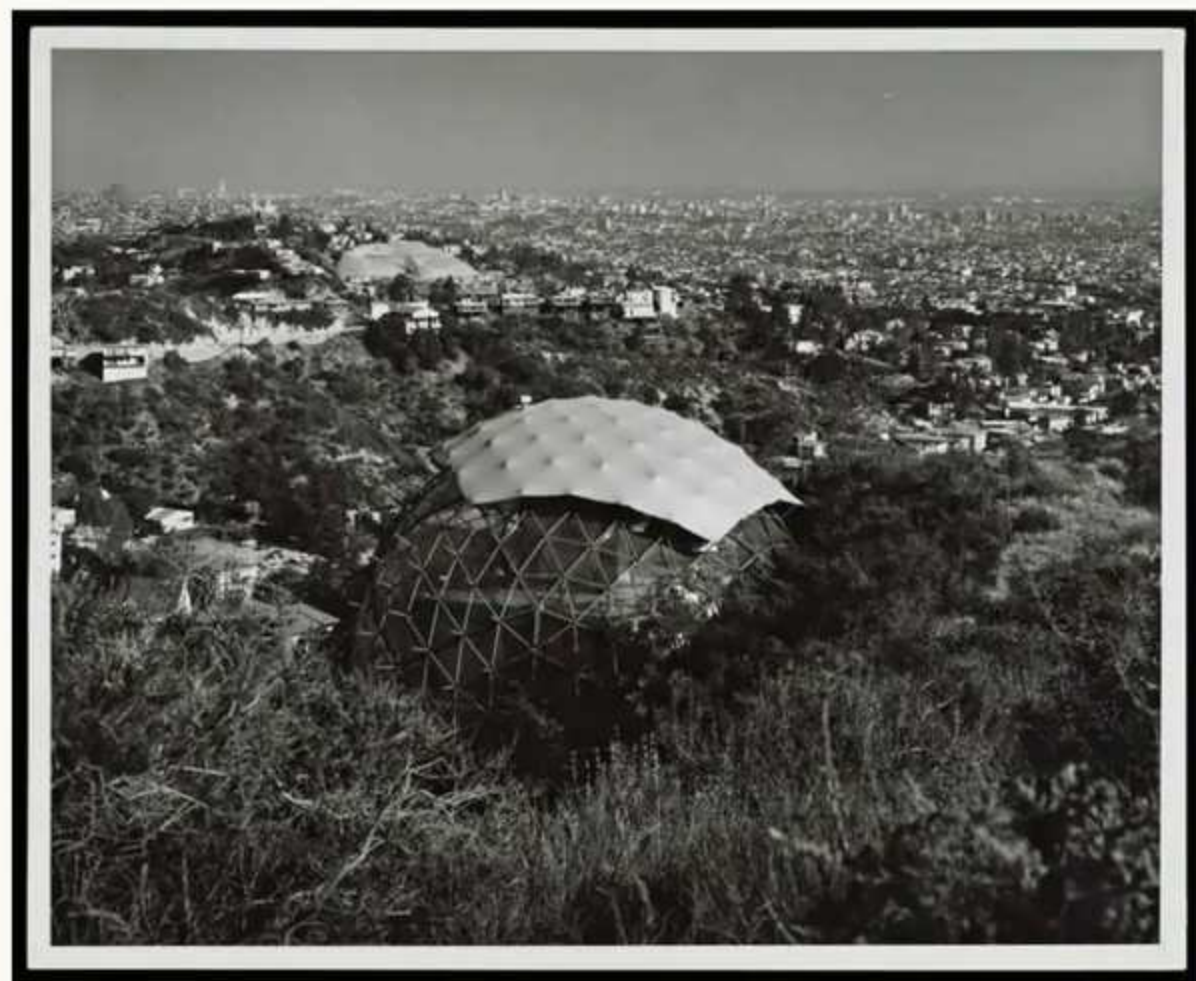
THE CREDIT
"Dome by Lindsay; Home by Judge"

SMOG
filmed October 1961; \$200 to Judge, \$300 to the project

LOS ANGELES TIMES HOME
July 1, 1962, cover

JULIUS SHULMAN
spring 1962

TIME
September 7, 1962: "like a fly dying in a bottle"



THE DOME IN THE CHAPARRAL ABOVE THE LOS ANGELES BASIN, THE VIEW A PASSING PHOTOGRAPHER WOULD HAVE HAD TWO YEARS EARLIER. JULIUS SHULMAN, 1962, JOB 3378, FRAME 7. GETTY RESEARCH INSTITUTE, LICENCE REQUIRED.



THE FRAME WITH THE SKIN PARTLY APPLIED, A FIGURE WITH A CAMERA ON THE STEPS OF THE CUT. JULIUS SHULMAN, JOB 3378, FRAME 3, 1961-62. DATE TO BE CONFIRMED; GETTY RESEARCH INSTITUTE. LICENCE REQUIRED.



BERNARD JUDGE SPREAD ACROSS THE LATTICE, FIXING THE LINES THAT HOLD THE SKIN, SEEN FROM INSIDE. JULIUS SHULMAN, 1963, JOB 3378, FRAME 29; GETTY RESEARCH INSTITUTE. LICENCE REQUIRED.

Spring 1962

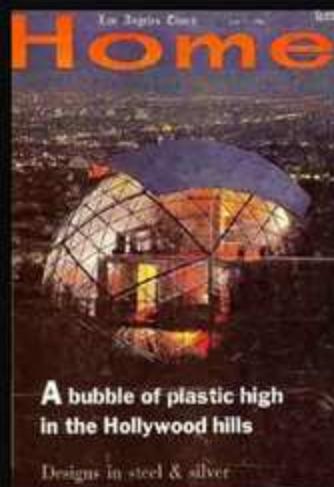
Julius Shulman captured this glowing photograph in the spring of 1962, immortalizing a drafty, cash-starved experiment as an unassailable space-age icon. The image anchored the cover of the Los Angeles Times Home magazine under the headline, "A bubble of plastic high in the Hollywood hills."

The global image of modern Los Angeles was actively being manufactured through Shulman's lens, predominantly via the Case Study House program: structured steel and glass on level pads, backed by corporate sponsors and a well-oiled editorial machinery. Pierre Koenig's Stahl House stood just a few ridgelines to the west during this same year, and Shulman photographed both. In stark contrast, the dome was a donated aluminum frame on a raw hillside cut, skinned in cheap plastic by students, and legally held by an absentee patron. Shulman's masterful composition hid the uncomfortable, leaky reality of the thermodynamic prototype, transforming it into the ultimate symbol of progressive California optimism.

Yet, this aesthetic climax masked a suffocating legal war. Just days after the glamorous publication, the city certified the structure—but the keys and the deed were handed to the financial backer, Hendrik de Kanter. The manufactured dream was complete, and the tragic battle for ownership had begun.



LIFE, JUNE 20, 1960, PP. 74-75: "LOS ANGELES IN A NEW IMAGE," PHOTOGRAPHED BY RALPH CRANE. RESEARCH COPY: LIFE/SHUTTERSTOCK QUOTE REQUIRED.



LOS ANGELES TIMES HOME, JULY 1, 1962: SHULMAN'S PHOTOGRAPH ON THE COVER. RESEARCH COPY, RIGHTS TK.



SMOG (FRANCO ROSSI, 1962), THE HOUSE AS LOCATION. ABOVE: THE PARTY ON THE LIVING DECK, WITH BERNARD JUDGE HIMSELF AMONG THE CAST. BELOW, LEFT: OUTSIDE THE DOME AT NIGHT, THE LAMP AND THE LIT SKIN. RIGHT: FIGURES ON THE SPIRAL STAIR AGAINST THE SKIN. FRAME STILL.



JULIUS SHULMAN'S PHOTOGRAPH OF THE HOUSE AT NIGHT, SPRING 1962 — THE PICTURE THAT MADE THE DOME AN ICON. JOB 3378, FRAME 22KE. GETTY RESEARCH INSTITUTE. LICENCE REQUIRED. EXTENDED ABOVE AND BELOW THE ORIGINAL FRAME BY GENERATIVE FILL.

9

The Battle of Ownership

"Patron term incorrect. Owner correct term."

— HENDRIK DE KANTER, MINUTES OF THE MEETING OF MAY 12, 1962

Behind the technical rigor of the Triponent House, a different structural failure was underway—one that would collapse the entire experiment. On January 18, 1960, Bernard Judge's attorney, Patrick Loughran, orchestrated a high-stakes, same-day double property transfer at the Los Angeles Hall of Records. Loughran forced the defaulting sponsor, Robert Hallberg, to quitclaim the deed back to Bernard. Yet the victory was immediately neutralized by financial exhaustion. That same day, he quitclaimed the deed to their slope laborer, Hendrik 'Hank' de Kanter, in exchange for a promised \$10,000 construction line. It was a bargain struck purely for survival, cushioned only by a written promise guaranteeing Bernard design credit and a nine-month tenancy. But de Kanter, now holding the physical deed, quietly initiated a systematic campaign to strip the visionaries of their rights.

The devastating inequity of this power dynamic was laid bare in the June 1962 Project Financial Statement. Bernard's 48.5 months of grueling sweat equity was quantified at a massive \$24,250. By contrast, de Kanter's total cash contributions amounted to a significantly smaller \$15,650. Yet, in the unforgiving eyes of California real estate law, cold currency entirely outweighed five years of Bernard's architectural genius and the collective labor of his USC classmates.

The escalating hostility reached a boiling point during a grueling, 4.5-hour showdown on May 12, 1962. The meeting was governed by two rules written at the top of the minutes. The official record noted the "Format is Psychoanalytical," enforcing a strict "3 minute time limit" for each statement. Jeffrey Lindsay passionately defended their authorship, declaring into the record: "Judge is architect. Lindsay dome. de Kanter patron." Unmoved, de Kanter relied on his absolute legal ownership of the dirt beneath them, shooting back with chilling detachment: "Patron term incorrect. Owner correct term."

Realizing de Kanter was executing a ruthless squeeze-out, Bernard and Lindsay retreated. On May 26, 1962, the architect and engineer forged a secret pact, signing their names in striking red ink: "We hereby agree to sue H. de Kanter." But the relentless machinery of the municipal courts favored capital over collaborative, utopian labor. Stripped of the legal rights to the prototype they had conjured from the hillside, Bernard and Jeffrey were forced to walk away. The keys to the space-age sanctuary were surrendered to an absentee owner, leaving the glittering bubble to face the canyon winds and the sun entirely on its own.



HOLLYWOODLAND ARCHITECTURAL COMMITTEE APPROVAL NO. 310, SIGNED BY C. RAYMOND JOHNSON, THE CARD ONCE PASTED TO A WORKING DRAWING. THE OWNER'S LINE STRUCK TWICE AND REWRITTEN "HENDRIK DE KANTER"; DESIGNER, BERNARD JUDGE. JUDGE PAPERS, UCSB ADC 335, CARD ISOLATED FROM THE SHEET BY THE AUTHOR, NO RETOUCHING OF THE PAPER.

10

An Eight-Year Skin

"I might also say that I found the building open with children playing inside."

— BERNARD JUDGE TO ED CARROLL, HOLLYWOOD LAND REALTY COMPANY, SEPTEMBER 21, 1964

The physical decay of the Triponent House was not an engineering failure; it was the direct, tragic consequence of its creators' forced exile. When Bernard Judge designed the dome, he knew that a lightweight thermodynamic envelope was not a static, maintenance-free monument. The five-mil weatherable transparent DuPont Mylar skin, costing a mere seven cents per square foot, was always intended as a consumable, sacrificial layer. Under the relentless assault of the Southern California sun, the plastic had a realistic West Coast life expectancy of only three to four years. Bernard had structured the dome around an active relationship of human stewardship: he left a specialized wooden template on-site so the occupant could systematically cut, tape, and replace individual triangular panels as they weathered. It was a domestic ritual of care—a continuous maintenance cycle that kept the space-age bubble alive.

But when the California courts handed the keys and the Certificate of Occupancy to Hendrik de Kanter on July 11, 1962, the stewardship ended. De Kanter, acting as an absentee owner, quickly turned the property over to the Hollywood Land Realty Company to manage as an unsecured rental. Legally barred from touching his own prototype, Bernard could only watch from afar as the baking sun and parched canyon winds began to tear his mathematical dream to shreds. Without the daily rhythm

of human care, the house began to physically rot from grief.

On September 21, 1964, Bernard returned to the ridge of Durand Drive to inspect the site. What he found was a scene of haunting desolation. The spidery three-thirty-second-inch aircraft-grade tension stays, designed to hold the envelope rigid, were snapping under the tension, their swaged Nicopress fittings pulling loose. The once-glittering transparent Mylar skin hung in shredded, flapping ribbons, exposing the interior Douglas fir timber decks to the autumn rain. The entrance stairs were rotting, the interior tropical garden had withered to dust, and neighborhood children had turned the unsecured, hazardous ruin into a playground.

Driven by responsibility, Bernard wrote a stern warning letter to Ed Carroll at the realty company. He documented the structural failures, warned of imminent collapse, and begged them to secure the site to prevent a child from falling through the rotted decks. His warnings went unheeded. The real estate firm ignored the letter, and the city's preservation boards refused to intervene. The spidery aluminum frame stood abandoned on its concrete piers, a skeleton in exile, waiting for a new family to attempt a desperate, temporary rescue of its fading future.

11

Dismantling the Future

"We took it down due to lack of money after finally solving all its problems."

— ALLEN DAVIDSON TO BERNARD JUDGE, JUNE 12, 1972

In the late autumn of 1969, a strange, brilliant specter appeared on the ridge of Beachwood Canyon. The decaying, transparent bubble of the Triponent House, which had stood abandoned and shredded by the wind for years, was suddenly wrapped in a shimmering, paper-thin sheet of reflective silver foil. The home had been purchased from Hendrik de Kanter's successors by a young, idealistic couple, S. Allen and Jerry Davidson. They inherited a structurally compromised, heavily leaking masterpiece that was rapidly rotting from water damage. Driven by a deep love for the structure's radical mathematics, the Davidsons sought to make the dome habitable again on an extremely limited budget.

On November 7, 1969, Allen Davidson climbed the stairs of City Hall and pulled a repair permit for a temporary, \$595.00 exterior envelope. His solution was a space-age band-aid: wrapping the entire forty-foot dome in three-mil (0.003-inch) aluminized, reflective silver Mylar. Physically, this silver skin transformed the home. It stopped the structural rot, reflecting the intense California sun to stabilize the interior temperatures while shielding the timber decks from the winter rains. Visually, the change was startling. The glowing, transparent lantern of Bernard and Dora's era was gone, replaced by a solid, mirror-like chrome sphere that bounced the surrounding hills and sky off its faceted surfaces.

Yet, as the Davidsons fought to save the physical structure, the municipal paper trail executed a final, crushing act of historical erasure. In the "architect" field of the permit, the city clerk completely bypassed Bernard Judge's name, typing "Buckminster Fuller" instead. It was a devastating, bureaucratic irony. While Fuller had briefly visited the unfinished frame in the winter of 1958 to offer a buyout, he had no hand in the home's architectural design, foundation engineering, or utility layouts. Yet, because the Department of Building and Safety possessed no institutional memory of the young USC student who had spent five years of his life building the home, they defaulted to the famous global brand of his mentor.

Furthermore, the permit was a legal trap. To secure approval, the city forced Davidson to sign a strict agreement on the reverse of the document, promising to completely remove the highly reflective silver skin no later than July 3, 1970. Under mounting pressure from municipal inspectors, the Davidsons faced a heart-wrenching reality: they lacked the capital required to permanently re-skin the experimental prototype to satisfy the city's rigid codes. The silver bubble had bought a brief, beautiful twilight, but the clock was ticking, and the shadow of the demolition crew was already creeping up the slope of Durand Drive.

3 APPLICATION TO ADD-ALTER-REPAIR-DEMOLISH AND FOR CERTIFICATE OF OCCUPANCY									
CITY OF LOS ANGELES DEPT. OF BUILDING AND SAFETY									
INSTRUCTIONS: Applicant to Complete Numbered Items Only.									
1. USE OF LOT	2. NEW USE OF BUILDING	3. NEW USE OF BUILDING	4. NEW USE OF BUILDING	5. NEW USE OF BUILDING	6. NEW USE OF BUILDING	7. NEW USE OF BUILDING	8. NEW USE OF BUILDING	9. NEW USE OF BUILDING	10. NEW USE OF BUILDING
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2949 Durand Drive									
Allen Davidson									
2949 Durand Drive									
STATE LICENSE NO. 79321									
OWNER									
29321									
11. SIZE OF EXISTING BLDG. LENGTH 40 WIDTH 40 2 NO. OF EXISTING BUILDINGS ON LOT AND USE									
12. MATERIAL OF CONSTRUCTION OF EXISTING BLDG. IS - Alum-Plastic Same									
13. NEW WORK: Demolish									
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STATEMENT OF RESPONSIBILITY

I certify that in doing the work authorized hereby I will not employ any person in violation of the Labor Code of the State of California relating to workmen's compensation insurance.

This permit is an application for inspection, the issuance of which is not an approval or an authorization of the work specified herein. This permit does not authorize or permit, nor shall it be construed as authorizing or permitting the violation or failure to comply with any applicable law. Neither the City of Los Angeles, nor any board, department, officer or employee thereof make any warranty or shall be responsible for the performance or results of any work described herein, or the condition of the property or equipment which such work is performed. (See Sec. 91.0202 L.A.M.C.)

Signature: *Allen Davidson*

Office of Engineering

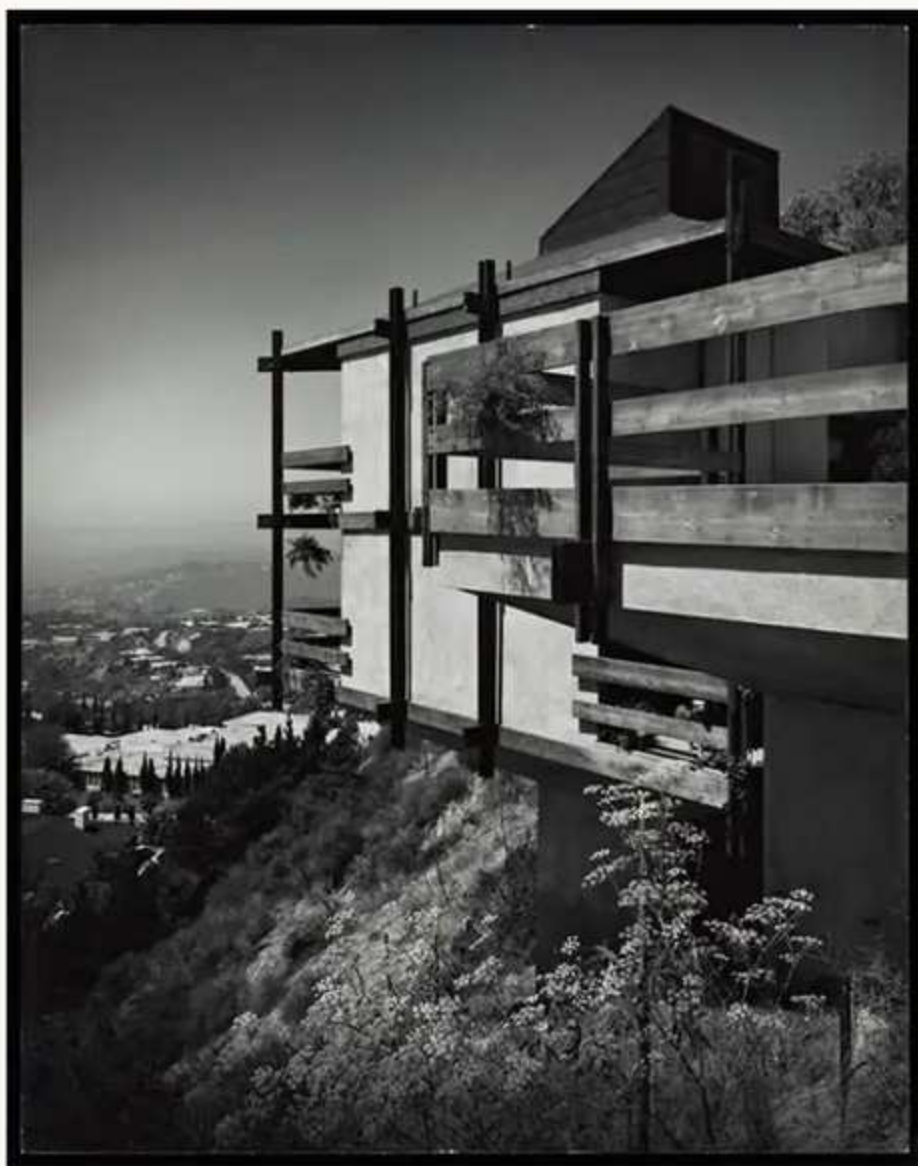
Conservation

Planning

Fire

Traffic

DEMOLITION PERMIT, SEPTEMBER 2, 1971: "ALUM-PLASTIC," "DEMOLISH," "COMPLY WITH B/L TIME LIMIT TO 9-30-71," \$6.30. CITY OF LOS ANGELES; PUBLIC RECORD.



THE TREE HOUSE. JUDGE'S SECOND EXPERIMENTAL HOUSE FOR HIMSELF, HOLLYWOOD HILLS, FROM 1968; PHOTOGRAPHED BY JULIUS SHULMAN, GETTY RESEARCH INSTITUTE; LICENCE REQUIRED, WEB-RESOLUTION STUDY COPY; SCAN TO BE ORDERED.

12

The Long Silence

"I don't know where it will end up."

— S. ALLEN DAVIDSON TO BERNARD JUDGE, JUNE 12, 1972

In September 1971, the Triponent House came to an abrupt end. Bankrupt, exhausted, and facing relentless municipal pressure, S. Allen Davidson pulled a demolition permit on September 2, 1971, to remove the two-story structure. Under a strict city-mandated deadline of September 30, a small crew of caretakers and volunteers unscrewed the shear bolts, unlaced the cable stays, and packed the entire one-thousand-pound skeleton into wooden crates. Once the trucks departed, a silence settled over Lot 13. The hillside was cleared, leaving only a circular footprint of twenty-one concrete foundation piers slowly being reclaimed by the wild Beachwood Canyon chaparral.

On June 12, 1972, Davidson penned a bittersweet post-mortem to Bernard Judge. He revealed that he had salvaged the aluminum skeleton and offered it to the Smithsonian Institution, which eagerly accepted the donation. This negotiation exposed the supreme hypocrisy of Los Angeles City Hall. The moment local officials caught wind that a prestigious national museum wanted the prototype, they scrambled to find public "funds" to keep and rebuild the dome locally. It was an irony: the very departments that had spent years choking the project with regulatory hurdles and demanding its demolition were now desperate to claim it as local heritage. Davidson flatly ignored them, choosing instead

to execute a final legal victory over their adversary, writing with bitter satisfaction: "Am also putting the screws to dekanter for the things he must have done to you... & tried to do to me."

Davidson shipped the cased framework to Washington, where the pipes were locked in storage vaults, initiating a fifty-year silence. But Bernard's career survived. Channeling these material and regulatory lessons into a lifelong pursuit of ecological modernism, he designed and built "The Tree House" in the Hollywood Hills in 1968. He elevated a lightweight steel platform on four central columns to leave the hillside untouched—bypassing the invasive grading and massive retaining walls that municipal codes had forced upon the dome. This design earned a prestigious Sunset Western Home Award in 1979. This triumph propelled him to Tahiti, where he collaborated with actor Marlon Brando to design a pioneering, sustainable eco-resort on the Tetiaroa atoll, utilizing solar power, waste recycling, and passive-cooling ventilation to seed the dome's thermodynamic DNA across the globe.



"THAT BEAUTIFUL PILE OF PIPES": THE STRUTS ON A CART IN FLAG HALL, JULY 2023. THE CATHOLIC UNIVERSITY STUDENTS SORTING THEM BY LINDSAY'S COLOR CODE. CATHOLIC UNIVERSITY OF AMERICA SCHOOL OF ARCHITECTURE AND PLANNING; CREDIT TO BE CONFIRMED.



A VERTEX AS BUILT: FLATTENED ENDS, STAINLESS TONGUES, ONE BOLT. THERE WAS NEVER A HUB. NATIONAL MUSEUM OF AMERICAN HISTORY, 2023 BUILD SEQUENCE, C08.



THE PARTS OF ONE JOINT, Laid OUT: NUT, TONGUE, BOLT, WASHERS, EYE BOLT AND CABLE FITTING. NMAH, 2023 BUILD SEQUENCE, C08.

13

Raised Again in Flag Hall

"I don't think I'll ever love anything as much as that beautiful pile of pipes you erected. Too bad it's been so much trouble."

— ALLEN DAVIDSON TO BERNARD JUDGE, JUNE 12, 1872

For over half a century, the one-thousand-pound aluminum skeleton of the Triponent House lay dormant in dark museum storage vaults, an exiled relic of a forgotten California future. Packed inside unlabeled wooden crates, Jeffrey Lindsay's brilliant "Weatherbreak" space-frame sat gathering dust, airbrushed out of active architectural histories. The Smithsonian's records dated the acquisition to 1983 under accession number 1983.0019, but with a credit line that completely bypassed the actual creators, reading simply: "Gift of University of Southern California."

In 2020, Abeer Saha, a curator in the Division of Work and Industry, unsealed the long-dormant crates. He discovered a puzzle: nearly one thousand metal struts in sixteen lengths, some broken, and a single sheet of paper with a color code but no instructions. The code was the key, but to translate it, researchers had to piece together a fragmented geographic trail. The letter detailing the frame's survival was in Santa Barbara; the skeleton sat in Washington; and the color-coded assembly diagrams that unlocked the structure were archived in Calgary.

In July 2023, this long silence finally ended. On the morning of July 5, a dedicated cohort of architecture students from the Catholic University of America gathered on the floor of the museum's soaring, light-filled Flag Hall. Armed with Lindsay's color codes, the students

meticulously sorted and mapped the 947 individual members—comprising 727 aluminum struts and 220 internal sprits. Utilizing the original structural logic, they stacked the flattened pipe ends and slid them onto the stainless steel tongues of the hubless, single-bolt joints.

Over three public days, the students physically bolted the glittering skeleton back together, fabricating new pieces only where the original struts had broken. Standing beneath the museum skylights until July 27, 2023, the raised dome stood as a monumental triumph over administrative erasure. Though Bernard Judge passed away in 2021, unable to witness this resurrection, his unyielding mathematical framework stood completely vindicated. The physical bubble of the Beachwood Canyon domestic experiment had vanished, but the skeleton of his dream rose again, bridging the gap between a compromised past and a future that had finally learned how to look.



HEXTEREDRUM STANDING AROUND, AERIAL, MUSEUM OF SCIENCE AND TECHNOLOGY, JULY 2000. PHOTO COURTESY, PHOTOGRAPHY, DOUGLAS, ET AL. (2000).
WHITE PAPER



AN ORIGINAL STRUT IN STORAGE AT THE NATIONAL MUSEUM OF AMERICAN HISTORY: THE END, FLATTENED, DRILLED AND FITTED WITH ITS EYE (ABOVE), AND THE WHOLE TUBE (BELOW). ACCESSION 1983.0019; SMITHSONIAN OBJECT PHOTOGRAPHS, CC0. WEB-RESOLUTION COPIES — THE MUSEUM FILES REPLACE THEM FOR PRINT.



CLOCKWISE FROM TOP: THE CATHOLIC UNIVERSITY OF AMERICA TEAM UNDER THE FRAME, THE ANSWER TO THE 1956 CREW PHOTOGRAPH: STRUTS BEING FITTED ON THE FLOOR OF FLAG HALL, THE FRAME RISING IN FLAG HALL, JULY 2021 (NMAH). PHOTOGRAPHS THE CATHOLIC UNIVERSITY OF AMERICA, 2023; RIGHTS TO BE CONFIRMED.

The frame is seventy-four years old. The house lasted thirteen.

WHERE THE FRAME WAS

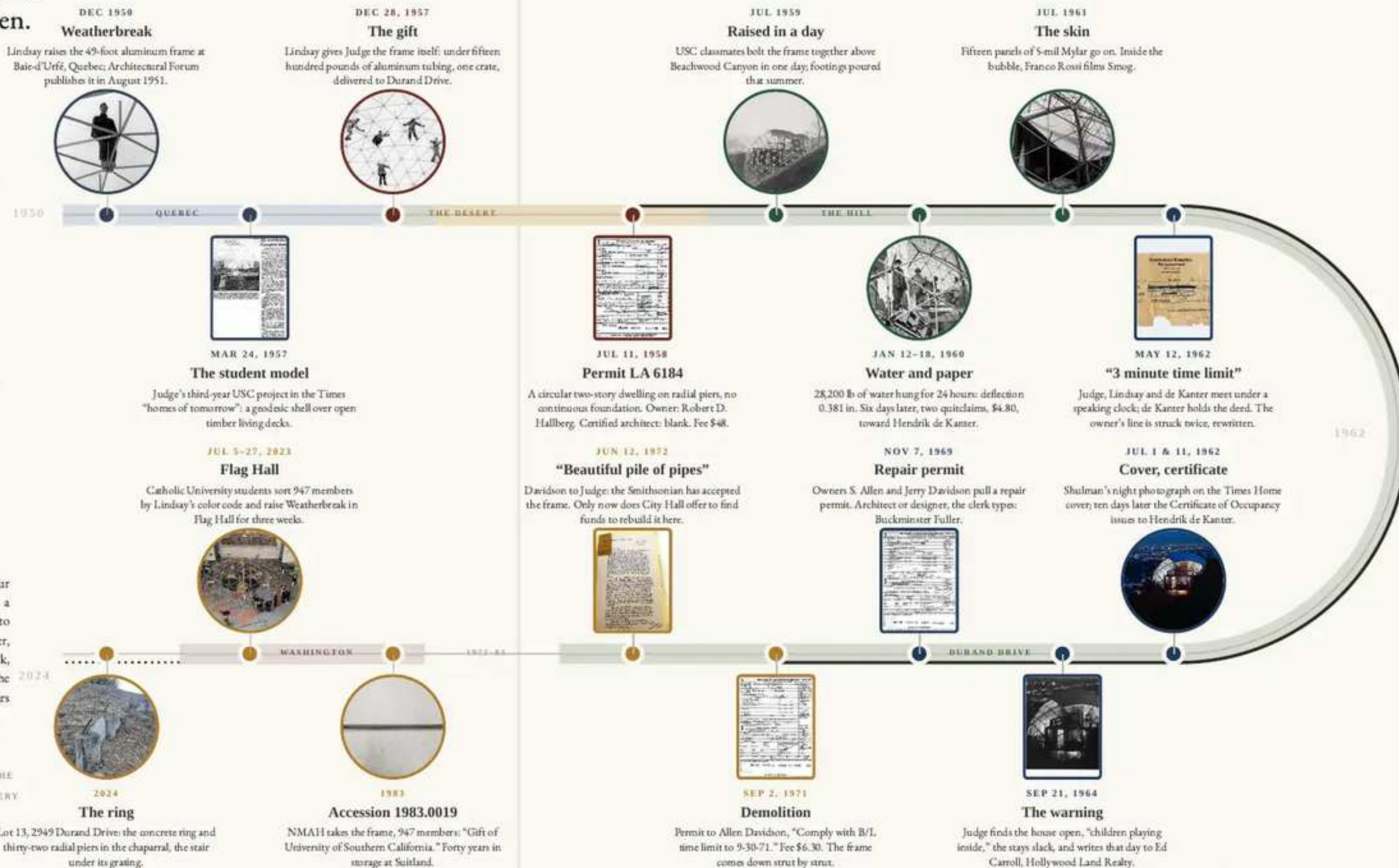
- Baie-d'Urfé, Quebec** 1950-57
Lindsay's Weatherbreak, forty-nine feet of aluminum tube, raised at Christmas 1950.
→ 2,000 MILES IN ONE CRATE · DEC 1957
- California City, Mojave** 1958-59
Raised in a day on a developer's lot, no permit, to measure the pier layout; the trial skins fall in the heat.
→ 100 MILES BACK TO THE HILL
- 2949 Durand Drive** 1957-72
Footings, the water test, the skin, the cover. The house stood from 1958 to 1971; the frame was here from 1957 to 1972.
1972-83 DISMANTLED, HELD BY USC · → 2,100 MILES
- Washington, D.C.** 1983-
Accession 1983.0019, 947 members. Forty years in storage at Suitland; three weeks in Flag Hall, July 2023.
- The site** 2024
The concrete ring in the chaparral.

WHERE THE FRAME WAS
THE HOUSE, PERMIT TO DEMOLITION
WHAT REMAINS

FOUR CITY DOCUMENTS

In thirteen years the City of Los Angeles issued four sheets for 2949 Durand Drive: a building permit, a Certificate of Occupancy, a repair permit, a permit to demolish. The owner's line reads Hallberg, de Kanter, Davidson, Davidson. The architect's line reads blank, blank, Buckminster Fuller, blank. Bernard Judge, the student who designed the house and spent five years building it on the hillside, is named on none of them.

PART ● PRELUDE ● I THE TRANSFER ● II THE EXPERIMENT ● III THE ICON ● IV THE RECOVERY



14

What Remains

"circular stairs 245"

— GENERAL FINANCIAL STATEMENT, JUNE 8, 1962: JUDGE'S OWN CONTRIBUTIONS TO THE PROJECT

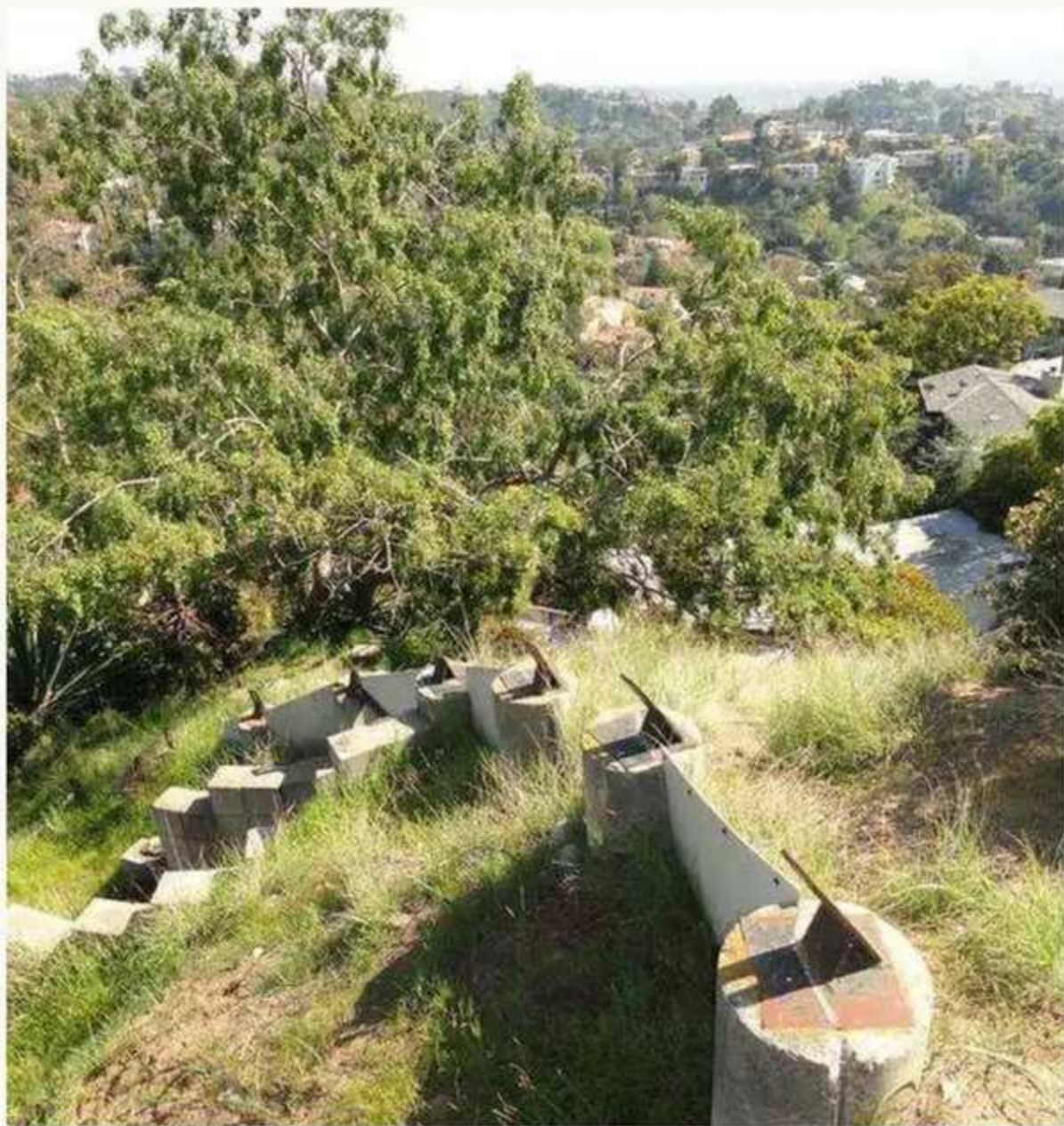
Today, the steep slope of Lot 13 on Durand Drive is a quiet, parched terrace of wild chaparral and sage. Standing on this ridge and looking out over the glittering metropolitan sprawl of the Los Angeles basin, a visitor is met by a stark, archaeological ruin: a circular ring of twenty-one concrete foundation piers, weathered and cracked by decades of exposure to the California sun. These radial concrete columns remain the only permanent physical anchor of a temporary dream, the deep footprints of a space-age sanctuary that once floated effortlessly above the ridge.

This silent clearing demands a final evaluation of Bernard Judge's original July 10, 1959 "Protocol"—the academic research questions he formulated at the start of his experimental journey. The protocol asked three fundamental questions: Can a lightweight geodesic dome be safely constructed on an unstable Los Angeles hillside? Will a conservative municipal bureaucracy permit its assembly and occupancy? And, ultimately, can humans comfortably inhabit a transparent, climate-controlled thermodynamic bubble?

From a technical perspective, the Triponent House answered each question with a triumphant yes. The spidery aluminum frame easily withstood the city's load tests, carrying twenty-eight thousand pounds of water with microscopic deflection. The city did eventually, if

reluctantly, grant a building permit and a Certificate of Occupancy. And for fifteen months, Bernard and Dora lived harmoniously inside the transparent bubble, verifying that its passive-solar design and internal ventilation successfully stabilized the interior microclimate.

The Triponent House did not fail because of its mathematics, its structural integrity, or its thermodynamic performance. Visually and structurally, it was a flawless success. Instead, the dome was crushed because its radical, non-Euclidean spherical geometry was fundamentally incompatible with the rigid, two-dimensional zoning codes and legal property systems of a municipal bureaucracy. It was a victim of real estate speculation, administrative erasure, and legal betrayal. While the physical structure was an ephemeral casualty of its time, its revolutionary proposition of lightweight, resource-efficient living remains an unassailable blueprint. Standing inside the concrete ring as twilight falls, the silent piers do not mark a failure, but an enduring promise of what the future could still become.



THE RADIAL PIERS STEPPING DOWN THE SLOPE IN PLAN ORDER, THE CANYON AND THE CITY BEYOND. AUTHOR'S SURVEY, 2049 DURAND DRIVE, SEPTEMBER 2024.



CLOCKWISE FROM TOP: THE RING FROM THE AIR, SEPTEMBER 22, 2024, FRAME 0781; THE UTILITY PANEL AT THE ROAD, THE ADDRESS IN BLUE MARKER; A SEGMENT OF THE RING FOUNDATION IN THE CHAPARRAL. AUTHOR'S SURVEY, 2024; NO LICENCE REQUIRED.

The Architecture of Anticipation

The Triponent House was a deliberate provocation against the postwar housing industry. While the mid-century building market remained tethered to rigid orthogonal grids, heavy concrete footings, and resource-heavy stick-and-stucco construction, Bernard Judge and Jeffrey Lindsay introduced a disruptive thermodynamic geometry. Their design rejected the status quo of permanent, manicured monuments, proposing instead a lightweight domestic architecture predicated on tension, high performance, and radical material economy. It was an ephemeral structure designed to float lightly on the hillside, utilizing a consumable, sacrificial skin that required active human stewardship to survive.

Though the physical structure is gone, its architectural thesis remains critical. Judge and Lindsay anticipated modern architecture's most urgent mandates: rapid assembly, minimal ecological intervention, and the complete decoupling of residential shelter from resource-heavy construction. In an era increasingly defined by climate instability and resource scarcity, the radical prototype tested on the parched slopes of Durand Drive has never been more relevant. The physical home was dismantled by municipal bureaucracy and speculative legal battles, but its unassailable proposition remains fully intact. It stands not as a failed experiment of a lost past, but as an active, urgent blueprint for a sustainable future.

The physical structure was dismantled, but the architectural proposition remains intact.

WHERE THE RESEARCH STANDS

1 The Judge Papers SANTA BARBARA, CALIFORNIA

Archived as Collection No. 0000335 at the University of California, Santa Barbara, this forty-linear-foot repository holds Bernard Judge's personal correspondence, preliminary sketches, and financial ledgers detailing his forty-eight months of sweat equity.

2 The Lindsay Fonds CALGARY, CANADA

Preserved at the Canadian Architectural Archives at the University of Calgary, this collection holds Jeffrey Lindsay's project files, early colour slides from Baie-d'Urfé, and the 1956 patents folder.

3 The Accession Record WASHINGTON, D.C.

The National Museum of American History at the Smithsonian Institution holds the physical aluminum struts, sprits, and joints under accession number 1983.0019, documenting the frame's 1972 salvage and its 2023 public resurrection in Flag Hall.

4 The Municipal Archive LOS ANGELES

The original 1958 building permit, 1962 Certificate of Occupancy, 1969 repair files, and 1971 demolition papers remain locked in the plan-check vaults of the Los Angeles Department of Building and Safety.

PRODUCTION ROADMAP

The manuscript is written, and publication is planned for 2028, seventy years after the original permit. What stands between the draft and the press is the picture record. Image rights: publication licences and reproduction files for about seventy images from four holders, the Bernard Judge Papers at UC Santa Barbara, the Julius Shulman archive at the Getty Research Institute, the Life Picture Collection, and the Jeffrey Lindsay fonds at the University of Calgary, whose colour slides of about 1961 may be the earliest colour record of the house. Clearance and reading: tracing the remaining rights holders, a legal and permissions reading of the manuscript, and the estate's permission for Judge's unpublished writings. Production: final manuscript, captions, and image program in 2027; design, index, proofs, and press in 2028. Dissemination: trade publication in English, launch lectures in Los Angeles, and the research record deposited with the collections that hold the papers.