開始にあたって

テキストの読みやすさを保つために、本文を自然読むように改変しました。
The site
A 55 Acre property in the remote hills of Malibu with several building sites and unique topography with panoramic views looking out over a nearby mountain range, a valley, and the ocean with distant island views. The site was previously owned and developed by the eccentric designer Tony Duquette who developed over 21 unique structures incorporating found objects from all over the world. In 1995 the Malibu Fire destroyed all but a few steel "Pagoda" like structures. When I first visited the site I was struck by the fantastic views, but also the creativity by which Duquette appropriated found objects and made them look as if they were originally crafted as traditional indigenous structures.

The Paoli
In searching for inspiration, I imagined a roof structure that would allow for an unobstructed view of the mountain range and distant views. The client, a single woman who owns a Mercedes car dealership, requested curvilinear / feminine shapes for the building. The progenitor of the buildings form was envisioned as a floating curved roof. It soon became apparent, that in fact, an airplane wing itself could work. In researching airplane wings and superimposing different airplane wing types on the site scale, the wing of a 747, at over 2,500 sq ft, each, became a ideal configuration to maximize the views and provide a support for wing with minimal additional structural support needed.

By incorporating many of the previous pads and retaining walls we are seeking to minimize significant grading and subsequent impact to the existing topography and landscape. The wing structures are conceived to be positioned to float on top of the concrete retaining walls that are cut into the hillside. The floating roofs derive their support from steel and concrete columns, which attach to strategic points on the wing where the engines were previously mounted. Framed self-supporting full height glass creates the enclosure from the concrete slab on grade into the wing as roof. The scale of a 747 is enormous—over 230' long x 195 feet wide and 63' tall with over 17,000 cubic feet of cargo area alone and represents a tremendous amount of material for a very economical price of less than $40,000 dollars.

In researching aircraft we began to realize that there are hundreds of airplanes that have been retired to sit in the deserts of California and are sold at the price of their principal raw scrap material, aluminum. The idea of utilizing recycled components and appropriating them in creative new ways is certainly consistent with the existing context of Duquette's structures. Additionally, incorporating prefabricated lightweight components off-site and delivering them to the remote site via helicopter, although at a cost of $8,000/hr, became realistic after considering the cost of getting traditional labor and material to the site over an extended period of time.

After visiting the planes and verifying with the building department that there is nothing specifically prohibiting the use of an airplane wing as a roof, we began to explore the actual structure of the wings in particular as well as to examine if other components might be used for additional auxiliary structures on the property. (We did find out that we have to register the roof of the house with the FAA/FAA Administration and pilots flying overhead must not mistake it as a downed aircraft.)

As we analyzed the cost, it seemed to make more sense to acquire the entire airplane and to use as many of the components as possible, like the Native American Indians used every part of the Buffalo. The property is to consist of several structures all made with components and pieces of a Boeing 747-200 aircraft.

Several other components are contemplated for use in a sublime manner, which include the fire pit and water element constructed out of the engine cowlings.

The 747 represents one of the single largest industrial achievements in modern history, and its abandonment in the desert makes a statement about the obsolescence and ephemeral nature of our technology and society. As a structure and as an engineering achievement the aircraft encloses a large amount of space using the least amount of materials in a very resource efficient manner. The recycling of the 4.5 million pounds of this "big aluminum can" is seen as an extreme example of sustainable reuse and appropriation. American consumers and industry throw away enough aluminum in a year to rebuild our entire airplane commercial fleet every three months.

Architects: David Hertz Architects-Studio of Environmental Architecture, Inc.—David Hertz, principal in charge; Lucas Gaittetta, project team
Client: Francie Rehfeld
Consultants: C.W. Howe Partners, Inc. — C.W. Howe, Kate Read, Cristobal Paraguay; structural: M3 Civil, Inc.—Tom Murphy, civil engineer
General contractor: Ron Senso Rodg Roder Built Structural system: reinforced concrete, steel columns, steel frame (top level only)
Major materials: Boeing 747 Aircraft Wing Components, concrete, steel, and glass
Site area: approx. 55 acres
Floorprint area: 5,175 sq ft
Total floor area: 4,726 sq ft
747 Aircraft Components were trucked across several Los Angeles area freeways and then airlifted to the site via a Sikorsky CH-64 Chinook Helicopter. Airlift transported by Columbia Helicopters, Portland, Oregon.
ward view: edge of two wings 見上げ: 2枚の翼の側面

ister bedroom on upper level 上階の主寝室