

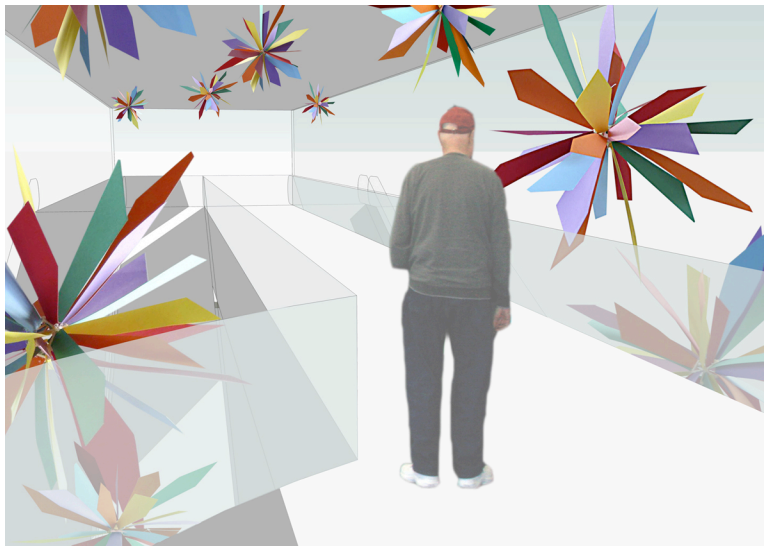
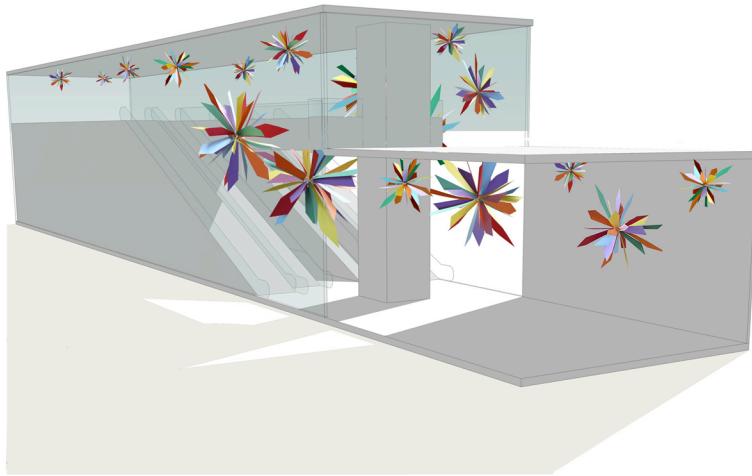
**Revised Art Proposal for the People Mover**

**at the Houston International Airport**

**by Hana Hillerova, June 2009**

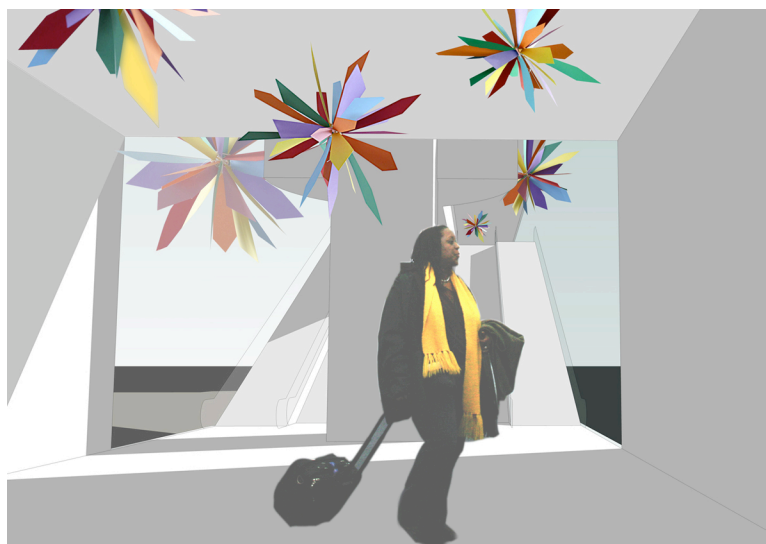
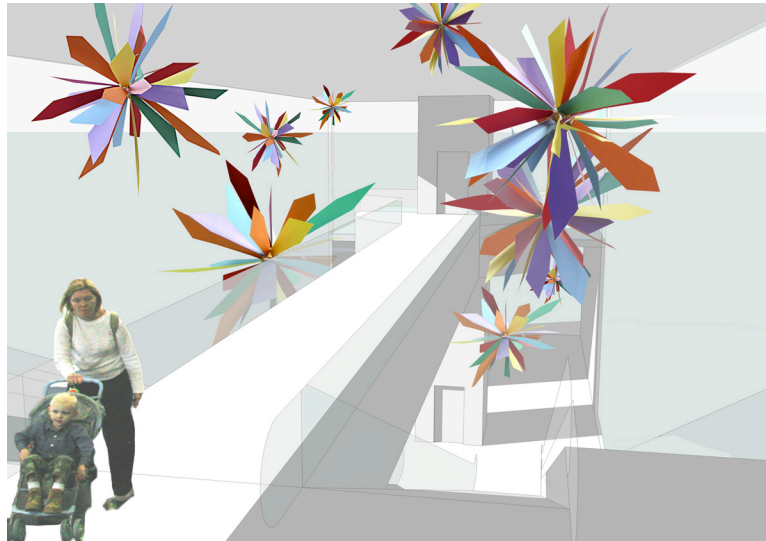
### **‘Houston, Can You Hear me?’**

The colorful lightweight sculptures of ‘Stars’ are suspended on cables with swivels and therefore gently move and rotate with the air currents in the people mover.



**‘Houston, Can You Hear me?’**

The passengers become astronauts traveling through space.



### The Idea

While walking and moving on the escalators of the people mover at the international airport in the Space City, the passengers become astronauts traveling through space. The colorful lightweight sculptures of 'Stars' are suspended on cables with swivels and therefore gently move and rotate with the air currents in the people mover. A passenger experiences each 'Star' as if he or she were orbiting through a galaxy. Passengers are instantly reminded of where they are: Houston, the city known for being instrumental in the exploration of the outer space.

### The Materials and Technical Description

*The technical support for the design of the sculptures is provided by the fabricator, Blumenthal Sheet Metal of Houston.*

The installation consists of 24 lightweight 'Star' sculptures made of 0.080 - 5052 aluminum. The surface of these is powder-coated. The sculptures vary in size from 3 to 8 feet in diameter. There are four 8 foot ones, four 6 foot ones, four 5 foot, four 4 foot ones and eight 3 foot ones. The base of each star is a steel icosahedron welded from 3/8 inch aluminum plate. To this structural base, the colorful aluminum 'rays' are bolted by T316 Stainless steel acorn bolts. The swivels are welded to the bases of the sculptures and clamped to the hanging wires. The 'rays' have a 5 degree bend length-wise in the center for structural support. Each 'Star' consists of 30 rays weighing around 1.5 to 2.5 pounds each, depending on the size/diameter of the sculpture. The total weight of the largest 'Star' (8 feet in diameter) does not exceed 100 pounds per hanging point, including the hanging hardware. The smallest, 3 foot 'Stars', weigh about 40 pounds each.

### Steps to Completion

*The technical and engineering support for the installation is provided by Stern Bucek Architects and the lighting system is designed by Charter Sills, both of Houston. The transportation and installation of the sculptures is provided by the fabricator, Blumenthal Sheet Metal of Houston.*

Artist makes paper maquettes of the 24 sculptures. These models are digitized by a Houston based company Blumenthal Sheet Metal fabricators to be used in the production of the sculptures. Stern Bucek architects design a 3D computer model of the people mover space from the CAD drawings made by HOK architects. Together with the artist, the 24 sculptures are laid out in exact positions in the virtual model.

Coordinating with the project manager Robert Nesbitt, the HOK architects and Manhattan Construction Company, the Houston based architectural firm Stern Bucek together with their engineer and Charter Sills design the hanging and the lighting system.

Blumenthal plasma-cuts the sculpture parts from 0.080 - 5052 aluminum. They are deburred and sanded for the powder coating. The artist picks colors for the sculpture parts and the sculptures are powder coated, polished and covered with protective varnish by Blumenthal's sub-contractor. Blumenthal constructs the steel icosahedron central bases of the 24 sculptures. Blumenthal constructs the hanging/lighting hardware.

In the first phase of the installation, the hanging wires and lights are installed into the structural grid of the ceiling (TBD in collaboration with HOK Architects, Stern Bucek Architects in the 2<sup>nd</sup> Stage of the Project). Blumenthal fabricates the elements necessary for anchoring the hanging wires to the ceiling and prepares the vitreous panels to accommodate the hanging system. According to Stern Bucek plans and for a fee coming from the artist's budget the Manhattan contractor or Blumenthal installs them (TBD in 2<sup>nd</sup> Phase of the project). After this, the vitreous panels of the ceiling are installed by Manhattan. Subsequently, Blumenthal transports the sculptures into the space in boxes, assembles them and clamps them onto the hanging wires. This is done with two scissor lifts and scaffolding. (The original idea of a hanging structure suspended below the vitreous panels has been modified to what we consider a more elegant solution, which also does not put additional weight on the ceiling structure).

The sculptures are suspended below the vitreous panels of the ceiling using 1/8" stainless steel aircraft cables (even though the weight is less than 100 pounds a piece). Cable break strength is around 1,000 pounds.

### Lighting

The lighting system for the sculptures is in addition to the fluorescent ceiling lights designed for the space by the HOK Architects. The special art lights are low wattage and they are connected to the same electrical grid, which is already part of the existing architectural design of the people mover (TBD). The lighting system is embedded in the ceiling.

### Permitting

According to the City of Houston Department of Planning, there are no permits necessary for the installation of artwork. Section 105.2, Item 16 of the 2003 IBC states that “Artwork” as defined in sec. 2-326 is exempt from city permits. As was determined at the meeting on June 12, 2009 with representatives of Continental Airlines, (Dave Brandenburg) and Manhattan Construction Company (James Matthews), the project ‘Houston Can You Hear Me?’ does not have additional structural requirements and therefore will not need additional permitting. The project will need a lighting permit (TBD in 2<sup>nd</sup> Phase).

### Maintenance

The powder-coated surface of the sculptures is brightly colored, uniform in texture and extremely durable. It is rust, stain and mold resistant. It can be maintained with standard industrial maintenance equipment, scaffolding or single person telescopic lifts.

The lighting system uses standard light fixtures available through mainstream suppliers. It requires infrequent maintenance in terms of burned out light bulbs.

### Timeline

The itinerary for the artist’s team is as follows:

*architectural and engineering services – 6 weeks*

*fabrication - 2 months*

*transportation and installation – 3 weeks*

As was determined at the meeting on June 12, 2009 with representatives of Continental Airlines, (Dave Brandenburg) and Manhattan Construction Company (James Matthews), Houston Arts Alliance (Matthew Lennon), HAS (Robert Nesbett) and the artists’ team - the artist (Hana Hillerova), the architect firm (Stern & Bucek) and the fabricator and installer (Blumenthal Sheet Metal) – will work around and accommodate the construction schedule of Manhattan Construction Company. The ‘people mover’ is scheduled to fully operate in August 2010.

## **Artist's Main Collaborators on the Project:**

### Blumenthal Sheet Metal Fabricators

Contact Kenneth "Sonny" Rose  
<http://www.blumenthalinc.com>  
1710 Burnett Street, Houston, Texas 77026  
Phone 713-228-6432, Fax 713-223-3410

Blumenthal was founded and has been based in Houston for 103 years. The company focuses mainly on the fabrication of art and architectural projects. Recent commissions include public art projects by Dixie Friend Gay, Tim Glover, Christian Eckart and Sheila Klein among others. Blumenthal is a recipient of numerous awards including: 2006 Exterior Finishes Award Project "Leopard Sky" At Bush Intercontinental Airport Houston, Associated General Contractor's Award For Project Excellence, Construction Specifications Craftsmanship Award and others.

### Stern Bucek Architects

Contact Bill Stern  
<http://www.sternbucek.com/>  
4902 Travis St, Houston, TX 77002  
Tel. (713) 527-0186

The firm Stern Bucek Architects was founded in 1999 and is the successor firm to William F. Stern & Associates Architects, which was founded in 1979. The two principals, William Stern and David Bucek, have 45 years of combined experience as registered architects in the state of Texas and are LEED accredited professionals. The firm has distinguished itself as a leader in the profession, having won over 25 design awards from professional associates such as the Houston Chapter of the American Institute of Architects and the Texas Society of Architects. The projects of Stern Bucek Architects have been consistently published in books and in such prominent journals as The New York Times, The Architectural Review, Metropolis, Texas Architect, Elle Decor and Metropolitan Home.

**Notes:**

Up-to-scale 3D virtual model of the 'people mover' by Chieh Jesse Cheng, using the free Google software 'SketchUp'.

Paper maquettes, photography, Photoshop digital drawings by Hana Hillerova.

Proposal and the presentation by Hana Hillerova.

Estimates by Blumenthal Sheet Metal, Stern Bucek Architects and Hana Hillerova.

PS: yes, the passengers in the drawings are supposed to look washed out...