# Inspiration America's

## **First Space Shuttle Orbiter**

By

### G.A. Blackburn

The very first Space Shuttle Orbiter was revealed to the public in 1972 at the North American Aviation facility in Downey California. The design concepts of the engineers were manifested in a full scale wooden mock-up that presented the immense size and challenge of America's next space exploration craft. This was the foundation for a fleet of six spacecraft that would open the highway to regular travel between earth and a new orbital workspace.



For the next three decades this mock-up served the designers, builders and NASA astronauts as an interactive working tool to efficiently operate Americas Space Transportation System. It also

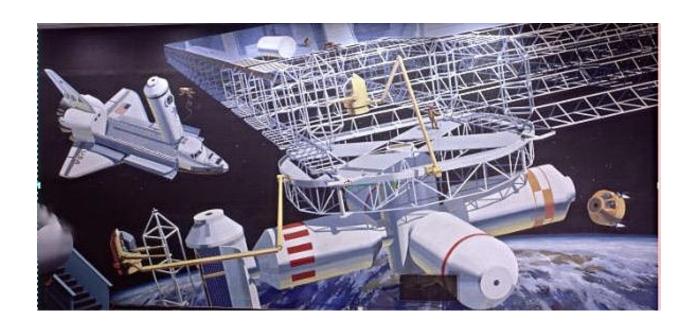
became the iconic attraction of the companies Downey site for thousands of visitors and the general public. A special room was prepared for its display and presentation. The Design Engineering Implementation (DEI) Room hosted designers, contractors, NASA, celebrities, teachers and students, families and employees as well as the general public for many years until the closure and transfer of the site by GSA to the City of Downey in December of 2000.



The mock-up was donated to the City as a historical artifact for the eventual display to the general public. It remained in Building 1 until 2014 when it was temporarily relocated to allow for demolition of Building 1. The City relocated it once again in 2015 for long term storage in its Public Works Maintenance yard where it is currently.



Rockwell Downey NMA Heritage Night 1992



DEI Wall Mural depicting the Shuttle Operational Future by Ted Brown 1973

Recently, through generous funding from the California State Legislature, the Shuttle Mock-up, now designated "Inspiration" is on its way to being deployed to a permanent home at the Columbia Memorial Space Center on the previous NAA Industrial Site.

#### What's Old is New Again

At the direction of the CMSC Director Ben Dickow, a renovation effort has been launched to return this National Treasure to public access. A special team of engineering consultants has been engaged to review, evaluate and guide the curation and renovation efforts of "Inspiration". This consulting Task Force consists of Gerald Blackburn, Charles and Allen Lowery, Ed Smith, Pete and Michael Magosky, some of who were members of the original NAA Space Shuttle Engineering Design Team.

An assessment of the mock-up condition is being made and a project schedule has been established to begin renovation actions. A local facility ,yet to be determined, will be utilized to house the mock-up until it can be re-located into a new building that will be constructed at the current Columbia Memorial Space Center Site.

#### **History on Display**

Architects and Contractors have been selected by the City to begin this new journey and mission for the Inspiration. Expectations are for an early Summer '22 Ground Breaking with a Grand Opening in the last quarter of 2023. There are anticipated plans for some public involvement in the project and the intent for the display to be interactive.

Of the original Space Shuttle Orbiter fleet of Seven vehicles, the first and the last are located here in Southern California, Inspiration at the Columbia Memorial Space Center and the Endeavour at the California Science Center. The original flight operations program for the Space Shuttle Orbiters ended in 2014 with Atlantis STS-XXX in Florida. The new inspirations for tomorrows missions to the future will now begin again here at Downey in 2023.

More information on Inspiration and its new mission can be found at the following websites:

<u>Columbia Memorial Space Center (columbiaspacescience.org)</u>

Home | downeynasasite (wixsite.com)

Home | Aerospace Legacy Fnd (aerospacelegacyfoundation.com)

#### **About The Author:**

#### Gerald Blackburn

#### Aerospace Engineer & Historian

Gerald is a native southern Californian who had a forty year plus career in Aerospace Engineering. He began at North American Aviation in 1962 and has worked on the X-15, the XB-70 Valkyrie, Apollo, Saturn SII, Apollo ASTP and Space Shuttle Programs.

He has also participated in the public education community as a local school board member, teacher, and STEM curriculum designer.

After retirement in 2003, he helped create the Aerospace Legacy Foundation and presided as president for several years.

He has published the book, "Downey's Aerospace History" by Arcadia Publishing.

He was Founder and CEO of Tinkers Corner LLC and is a member of the Columbia Memorial Space Center Foundation Board of Directors.

He is currently the founder and CEO of the Katherine & Gerald Blackburn Charitable Foundation.

You might have seen him or heard him in some of the recent documentaries celebrating Apollo's 50th anniversary on CBS, NBC, Discover, History, Science, PBS American Experience, PBS https://www.kcet.org/shows/blue-sky-metropolis or the Apollo Chronicles.

You also might have heard him as technical commentator during the long slow ride of the Endeavour shuttle to her new home in California. You can see his interview on YouTube: https://youtu.be/XXSgOtYOV6Q

Images and Some editorial courtesy of CMSC and ALF.