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NASA Downey Site

Building 290 Historical Summary

Building 290 is located in the southwest portion of the NASA industrial site on parcel II. Building 290 is adjacent to the west and contiguous with Building 6.



The building was designed and constructed in 1964. It consists of a two-story structure of concrete and steel beams with a flat roof on the west side. A High Bay section (80 foot ceiling), a Low Bay section (40 foot ceiling) and a two story section east of the low bay adjacent to Building 6. The total square footage is 165,100.

This building was originally constructed as the Systems integration and checkout facility for the Apollo Program and later the Space Shuttle Program. More than 20 vehicles were assembled and integrated in this facility. This was the final assembly and checkout area for the Apollo 11 Spacecraft. The High and Low Bay areas of the building are the most significant consisting of approximately 170,000 square feet they were originally configured as a Class 100,000 Clean Room the largest in the

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world until the Soviets built one in the Soviet Union. The facility had three additional 4,500 square foot clean rooms for bench and instrument testing. Thousands of skilled spacecraft assemblers, technicians, engineers and support staff worked in this facility. There are four essential historic elements of this building:



FLOOR NO. 2	39,063	14,322	53,385									BLDG NO.	290
FLOOR NO. 1	83,016	23,147	106,163									SITE	DNY
BASEMENT	5,352	200	5,552									OWNER	NASA
TOTAL BLDG	127,431	37,669	165,100									DATE	DECEMBER 86
	NET AREA	ATSU	GROSS AREA	HC CAPACITY	DEPT	SQ FT	DEPT	SQ FT	DEPT	SQ FT			



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1. The most significant element was the High Bay Area (HBA) located in the center of the building an extending north to south. The HBA was the final assembly area for the Apollo Command and Service Modules and later the Space Shuttle Crew modules and Aft Thrust Structures. The facility was certified to operate as class 100,000 clean room
2. Adjacent to the HB on the east was the Low Bay Area (LBA) This facility specifically constructed initially for fabricating and assembling critical Apollo hardware was a state-of-the-art precision clean room.
3. An Astronauts Dormitory was constructed to serve as temporary quarters for the Apollo astronauts when they were on site working with engineers and technicians on the command module spacecraft.
4. An area was maintained as the Apollo Test & Checkout Facilities which serviced the many hardware sub system components that were processed before being installed on the spacecraft.

Building 290 was the manned spacecraft assembly and integration center for the American Space-Age period of this past century. In this facility assemblers, technicians and engineers created the hardware that took men to the moon and made the International Space Station possible.



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National Registry Criterion Qualification¹:

- The NASA S-II Program (1962-1969), The Project Apollo Spacecraft Development Program (1963-1975) and the Skylab Space Program (1961-1975)
- The subassembly, manufacture and testing of components of the Space Shuttle Orbiter Program (1972-1999)
- Association and on-site participation with American Astronauts from Apollo and Space Shuttle Programs (1961-1999)

References:

1. Historical Report, "Final Historic Buildings and Structures Inventory and Evaluation", November 1999, Earth Tech Inc. for NASA JSC.
2. Historic American Engineering Record, National Park Service, Department of Interior.
3. Aerospace Legacy Foundation
4. Mr. G.A. Blackburn, Project Manager, Boeing Corporation, Rockwell Corp, North American Aviation (Retired)



Exterior view of Building 290 at North American Aviation, 1960's.



Exterior view of Building 290 at Downey Studios 2010. (Latimer)