

PRATT & WHITNEY PLANT
High Power Laboratory
(Pratt & Whitney Plant, Building No. 54)
1500-2000 East Bannister Road
Kansas City
Jackson County
Missouri

HAER No. MO-118-Q

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Midwest Regional Office
National Park Service
601 Riverfront Drive
Omaha, Nebraska 68102

HISTORIC AMERICAN ENGINEERING RECORD

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Location: 1500–2000 East Bannister Road, Kansas City, Jackson County, Missouri

Present Owner: U. S. Department of Energy, National Nuclear Security Administration

Present Use: NNSA uses this building as a miscellaneous fabrication lab, including sheet metal fabrication, miscellaneous data storage capability, and a vehicle repair shop.

Significance: The High Power Laboratory was originally used for research and development of modification to the Pratt & Whitney Double Wasp Engine. From the initial years of Pratt & Whitney with its Double Wasp engines, through the years of Westinghouse, responsible for manufacturing the J34 Gas Turbine engine, to the development of thermonuclear weapon components during the Cold War, the Kansas City Plant housed a multi-disciplinary engineering and manufacturing facility tied to the nation's homeland security. Due to the diversified requirements of subsequent corporations, the original Pratt & Whitney Plant was modified and added to, meeting the needs of ongoing technological advances while retaining the structural elements that made this complex a landmark of American industrial design.

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PART I. HISTORICAL INFORMATION

A. Physical History

1. Date of Construction: 1944
2. Architect/Engineer: Albert Kahn Associated Architects and Engineers, Detroit, Michigan
3. Builder/Contractor/Supplier: Long-Turner Construction Company, Kansas City
4. Original Plans: Yes
5. Alterations and Additions: Yes (See Part II: Section B)

B. Historical Context

The High Power Laboratory was built as a research and development facility to accommodate the modifications to the Pratt & Whitney Double Wasp engine to increase the engine's overall horsepower capacity.

PART II. ARCHITECTURAL INFORMATION

A. General Statement

This "L"- shaped brick building occupies 31,309 gross square feet and contains four levels with approximate dimensions of 160' x 160'.

1. Architectural Character: Modern Industrial
2. Condition of Fabric: Excellent

B. Description of Exterior

The main façade of the High Power Lab faces west. There are three large overhead metal receiving doors: one at the far north bay, with the two remaining doors at the south bays. Fenestration is minimal and is located at the center bays of the first and second story. Units are tripartite, multipaned with cast stone sills. The second story door and exterior metal stairway are non-original.

C. Description of Interior

Due to restricted access, it was not possible to examine the interior of the building.

D. Site

Building No. 54, attached to the west façade of building No. 52, is sited to the east of a large surface parking lot. The Main Manufacturing Building is located to the southwest.

PART III. BIBLIOGRAPHY

Primary Sources

NNSA Archives. Bannister Federal Complex, 1500-2000 East Bannister Road, Kansas City, Missouri.