

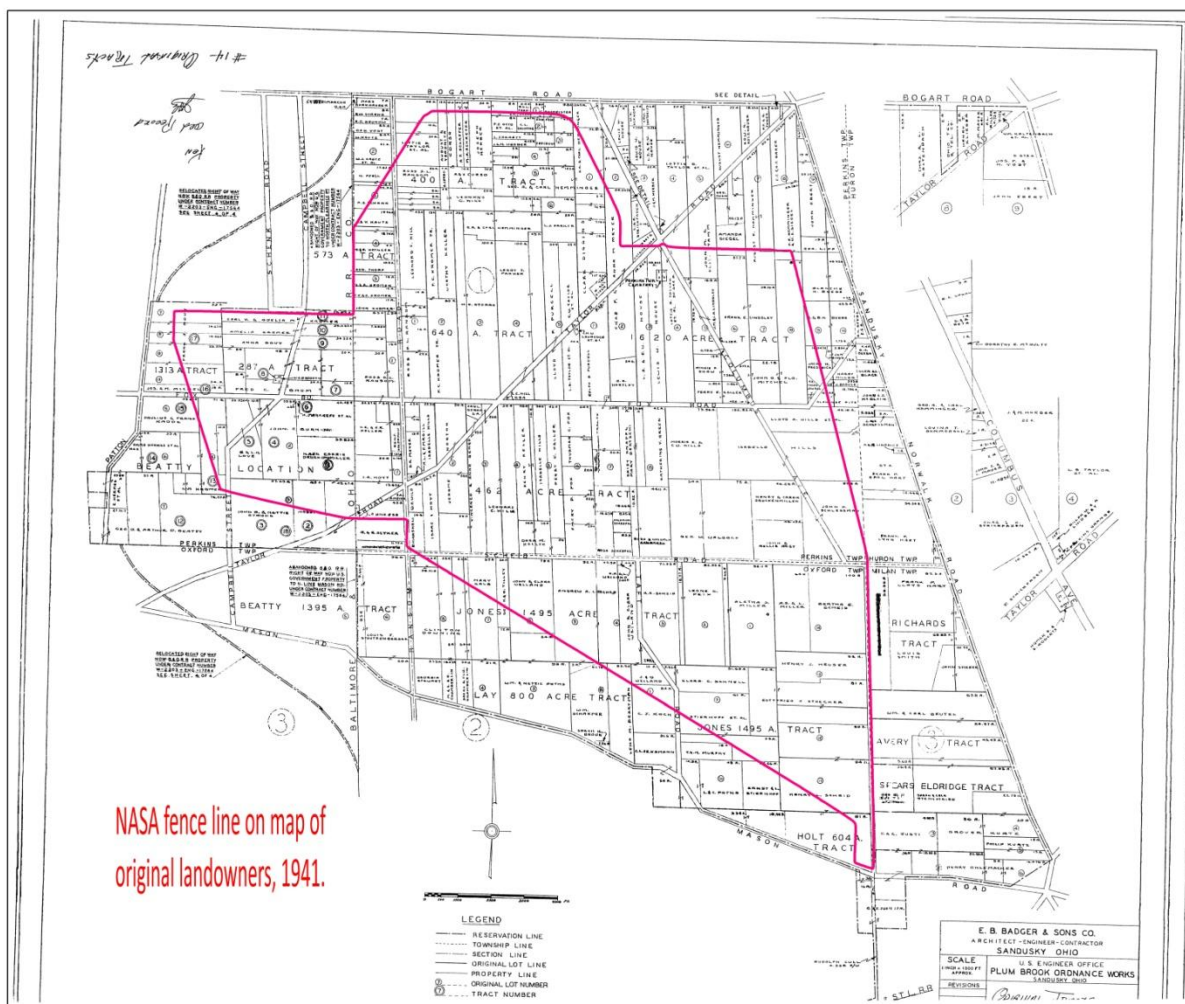
The History, Origin of NASA's Plum Brook Station by John Blakeman

Did you know that the station got its name from the small stream running through the property that in early settlement times had native wild plum trees at its headwaters area near Mason Rd?

1940s – The Plum Brook Ordnance Works

In January 1941, by eminent domain, the War Department acquired roughly 9,000 acres of land to construct a munitions plant. The plant, the Plum Brook Ordnance Works, produced explosives, such as TNT, until the end of World War II.

The red line locates the fence line of the original Plum Brook Ordnance works, which now is the fence surrounding NASA's Armstrong Test Facility, formerly "Plum Brook Station." The fence encloses about 5400 acres. The original Plum Brook Ordnance Works owned and utilized large areas outside the fence, most of which is now private property.



NASA fence line on map of original landowners, 1941.

Near Cleveland, NASA's Glenn Research Center was originally established as the Aircraft Engine Research Laboratory in 1941 by the National Advisory Committee for Aeronautics (NACA). It was NACA's third research laboratory and the only one dedicated to propulsion. The lab quickly became involved in the new types of propulsion that emerged during World War II—the turbojet, ramjet, and rocket. Researchers in the rocket field concentrated on the study of new fuels and propellants. The rocket work grew in the 1950s, and liquid hydrogen came to be regarded as the optimal propellant

for new outer space rockets. The lab also began expanding its research into nuclear and electric propulsion during this period.

1950s – Operational Expansion

Five hundred acres of the 9000 acres at Plum Brook Station in Sandusky, Ohio, in the north area south of Bogart Road, were transferred to NASA in September 1955 to build a nuclear reactor to test materials in rocket-borne propulsion reactors. With the advent of the space program in 1958, the National Advisory Committee for Aeronautics (NACA) became the National Aeronautics and Space Administration (NASA). During the 6 years that it took to build the reactor, it became apparent that additional facilities to test conventional rocket engines and their components would be needed. The large unused tracts of land at Plum Brook were perfect for the dangerous fuels work. An additional 3000 acres at the site were used to build a series of rocket test facilities known as the Rocket Systems Laboratory.

In the fall of 1959 NASA requested the use of another 3500 acres to build what would be the Spacecraft Propulsion Research Facility

1960s - NASA

NASA acquired full ownership of lands within the WWII fence line in 1963. From 1963 to 1973, the Plum Brook Reactor Facility was used to study the effects of radiation on materials used in spaceflight. It was shut down in 1973 and all the nuclear fuel was shipped offsite to a U.S. Department of Energy facility in Idaho for disposal or reuse. NASA completed decommissioning and demolition of the Reactor Facility in 2013, leaving the land where it was located safe for reuse.

2020 - NASA'S PLUM BROOK STATION GETS A NEW NAME

NASA's Plum Brook Station at Sandusky, Ohio completed a complicated three-month series of tests of the agency's Artemis I Orion crew capsule, certifying that it would safely operate in deep-space environments. At the same time the site's name was redesignated the Neil A. Armstrong Test Facility. The legislation directing the change was signed into law on Wednesday, Dec. 30, 2020. As directed by the legislation, the formal name of the Plum Brook Station was to be the NASA John H. Glenn Research Center at the Neil A. Armstrong Test Facility; known commonly as the "Armstrong Test Facility."

