

# NASA's Glenn Research Center Center Overview

NASA's Glenn Research Center in Cleveland designs, develops, and tests innovative technology to revolutionize air travel, advance space exploration, and improve life on Earth.

One of 10 NASA centers, and the only one in the Midwest, Glenn is a vital contributor to the region's economy and culture.

# Glenn

- Partners with local and national businesses
- Collaborates with colleges and universities
- · Shares NASA's message at schools, fairs, and events
- Offers internships, mentorships, and fellowships

## What We Do

Glenn supports all of the agency's missions and major programs. A multitude of NASA missions have included Glenn contributions, from Mercury and the Space Shuttle Program to the International Space Station and Artemis.

Every U.S. aircraft has NASA Glenn technology on board, making flight cleaner, safer, and quieter. Today, we are conducting revolutionary aeronautics research in electrified aircraft propulsion, advanced materials, and alternative fuels to help the nation achieve its climate change goals. We are also exploring next-generation supersonic and hypersonic aircraft.

The road to the Moon goes through Ohio. Glenn's world-class test facilities and unrivaled expertise in power, propulsion, and communications are crucial to advancing the Artemis program. Glenn's solar electric propulsion will help propel future exploration missions to the Moon and eventually Mars, where astronauts will conduct scientific research and establish a presence on the surface.

# **Our Expertise**

- Air-Breathing Propulsion (Jet Engines)
- Communications
- In-Space Propulsion and Cryogenic Fluids Management
- Power, Energy Storage, and Conversion
- Materials and Structures for Extreme Environments
- Physical Sciences and Biomedical Technologies in Space



Air-Breathing Propulsion



Communications Technology and Development



In-Space Propulsion and Cryogenic Fluids Management



Power, Energy Storage, and Conversion



Materials and Structures for Extreme Environments



Physical Sciences and Biomedical Technologies in Space



#### **Economic Impact**

Glenn is essential to the Ohio economy, fueling industries, supporting job growth, and increasing the demand for a highly skilled workforce. According to an economic impact study by Cleveland State University, Glenn's impact in Ohio was nearly \$1.9 billion per year. The center's activities in Northeast Ohio created and supported more than 9,000 jobs, increasing labor income by over \$853 million.

#### **Brief History**

NASA Glenn was founded in 1941 by the National Advisory Committee for Aeronautics (NACA), which was the precursor to NASA. Glenn was initially called the Aircraft Engine Research Laboratory. After several name changes, in 1999 it received its current name, the NASA John H. Glenn Research Center. The center was named in honor of former senator John H. Glenn, an Ohioan who was the first American to orbit Earth when he piloted "Friendship 7" around the globe three times in 1962.

## Facilities

Located near Cleveland Hopkins International Airport and the Cleveland Metroparks' Rocky River Reservation, Glenn's main campus, Lewis Field, is situated on 307 acres of land and contains more than 100 buildings. The world-class facilities at Lewis Field include wind tunnels, drop towers, vacuum chambers, and an aircraft hangar.

NASA's Neil Armstrong Test Facility, a subset of NASA Glenn, is located 50 miles west of Cleveland in Sandusky, Ohio, on 6,400 acres of land. It has large, unique facilities that simulate the environment of space. Both locations bring NASA, military, academic, and private industry customers to Ohio to perform aerospace research and testing.

The NASA Glenn Visitor Center is located at Great Lakes Science Center in downtown Cleveland.

#### Staff

More than 3,200 people work at Glenn, including civil servants and on-site contractors. A highly skilled workforce of scientists, engineers, technicians, and administrative and support personnel comprise the diverse Glenn team.

National Aeronautics and Space Administration

Glenn Research Center 21000 Brookpark Road Cleveland, Ohio 44135 www.nasa.gov/glenn

www.nasa.gov