



## 10 Things To Know About NASA's Glenn Research Center

---

**1. NASA Glenn's economic impact in Ohio exceeds \$1.9 billion per year.**

According to an economic impact study by Cleveland State University's Center for Economic Development, Glenn creates and supports over 9,000 jobs and generates nearly \$853 million in labor income and approximately \$210 million in tax revenue per year.

**2. Glenn scientists and engineers are prolific inventors.**

The research center holds more than 725 patents and has won over 120 R&D 100 Awards, also known as the Oscars of innovation. That's more than any other NASA center. Glenn strives to increase private sector revenue and contribute to private sector job growth by licensing its inventions.

**3. Every U.S. aircraft has NASA Glenn technology on board.**

NASA is with you when you fly. Today's commercial airliners are safer, quieter, and more fuel efficient because of NASA Glenn technology. Glenn advancements such as ice detection and air traffic control systems have made flying safer. Glenn jet engine combustors have resulted in more efficient aircraft engines, and Glenn-developed nozzle chevrons are used to make the Boeing 787 Dreamliner and new 737 MAX quieter.

**4. Glenn is transforming aviation by developing revolutionary technologies for aircraft and the national airspace system.**

Glenn is working to dramatically improve efficiency, reduce costs and noise, and maintain safety in crowded skies. The center leads the agency's effort to develop hybrid electric propulsion systems for commercial passenger aircraft. (Think Prius in the sky.) These systems will reduce energy usage, emissions, and noise pollution. They'll also open potential new markets and business opportunities for American companies. Glenn is testing these cutting-edge systems in the NASA Electric Aircraft Testbed in Sandusky.

**5. Glenn has helped make NASA's most famous missions possible.**

From Mercury and Apollo to the Space Shuttle and the International Space Station, Glenn has supported NASA's human exploration missions. We've also played important roles in robotic exploration missions, such as the Mars rovers and Cassini's mission to Saturn.



## 10 Things To Know About NASA's Glenn Research Center

**6. Glenn plays an important role in the agency's mission to send the first woman and first person of color to the Moon.**

Glenn is working to support Artemis and the agency's Moon to Mars efforts in several key areas. Glenn manages the development of the Orion crew capsule and service module. The center also provides space environment testing of Orion and other mission-critical hardware, and we lead the design and development of a crucial part of the Space Launch System rocket. Additionally, Glenn leads the development of the Power and Propulsion Element for the Gateway lunar space station, which will be the first component to launch to the Moon.

**7. Glenn's world-renowned test facilities bring NASA, military, and private industry customers to Ohio.**

Glenn's main campus, Lewis Field, is 350 acres and has more than 100 buildings, including world-class test facilities such as supersonic wind tunnels, zero-gravity drop towers, vacuum chambers, and a research aircraft hangar.

**8. NASA's Neil Armstrong Test Facility is home to the world's largest and most powerful space environment simulation chambers.**

It's no wonder Marvel Studios chose the test facility in Sandusky to film scenes from the hit movie "The Avengers." The Armstrong Test Facility sits on 6,400 acres of land and is home to the world's largest thermal vacuum chamber and the world's most powerful spacecraft shaker table and acoustic test facility. It is the only place in the world where an upper-stage rocket can be fired in a vacuum, and the only place in the world that can test a full-sized spacecraft for all the conditions of launch and flight in one facility. It has been used to test Mars rovers, the Orion spacecraft, and commercial space hardware for Boeing and SpaceX.

**9. Glenn is working with the National Oceanic and Atmospheric Administration (NOAA) and area universities to improve the health of Ohio's waterways.**

Glenn has partnered with NOAA to monitor Lake Erie and other Ohio waterways for harmful algal blooms. Using airplanes and drones equipped with remote-sensing instruments to supplement satellite imagery, Glenn can provide continual monitoring of algal blooms even when it's cloudy.

**10. Glenn is a source of pride and inspiration for Northeast Ohio citizens.**

Through its Visitor Center at Great Lakes Science Center and year-round participation in local events, NASA Glenn informs and inspires thousands of Northeast Ohioans and visitors every year. Glenn offers internships, mentoring, and fellowships for students, and Glenn scientists and engineers frequently volunteer as tutors, mentors, and guest speakers.

National Aeronautics and Space Administration

**Glenn Research Center**  
21000 Brookpark Road  
Cleveland, Ohio 44135  
[www.nasa.gov/glenn](http://www.nasa.gov/glenn)

[www.nasa.gov](http://www.nasa.gov)