A sounding rocket takes flight from Wallops Flight Facility.

From the sea to the moon and beyond, Wallops plays a vital role in conducting aerospace and science research

The NASA Goddard Space Flight Center’s Wallops Flight Facility, established in 1945, is the agency’s premier location for conducting research using suborbital vehicles – aircraft, scientific balloons and sounding rockets. Its partnership with the Mid-Atlantic Regional Spaceport expands the facility’s capabilities in supporting the launch of orbital vehicles.

Since its beginnings as a facility for conducting high-speed research on aerodynamic designs, Wallops has launched more than 16,000 rockets carrying aircraft models, space and earth science experiments, technology development payloads, and satellites. Partnering with academia, industry and other government facilities in the mid-Atlantic region, Wallops is a test site for the development of unmanned aerial vehicle use in the national airspace system.

Wallops … extending NASA’s reach for science and technology

Launch Range

Wallops is NASA’s only rocket launch range. It supports missions for suborbital and orbital rocket vehicles by providing range safety, surveillance, vehicle tracking and communications, command systems, meteorological services, optical systems, a range control center, payload processing and launch vehicle integration facilities. In addition, the range’s mobile assets can be deployed to support rocket launches at Wallops and other worldwide locations. The Wallops rocket range supports a variety of projects that include launching first-time vehicles as well as those with a proven track record. In 2018, the range has six suborbital and three orbital rocket launches scheduled.

Wallops also manages NASA’s only research airport, which includes three aircraft runways. The airport supports testing and operations of a wide variety of NASA, Department of Defense and commercial aircraft. In addition, an unmanned aerial systems runway is located on Wallops Island for testing small UAS vehicles.

Suborbital Programs

NASA suborbital vehicle programs at Wallops Flight Facility support Earth and space research and technology development. The programs support researchers from NASA, other government agencies, educational institutions and international organizations. In addition, these vehicles support educational programs providing the next generation of scientists, technologists, engineers and mathematicians with opportunities for hands-on experience in developing and flying science experiments.
NASA’s suborbital program at Wallops is far reaching. It conducts more than 50 missions annually not only in the continental United States but at locations around the world from the Arctic to the Antarctic.

Science Research

The Science Field Support Office conceives, builds, tests, and operates research sensors and instruments both at Wallops and at remote sites. Scientists use aircraft, balloons and satellite platforms to participate in the full complement of Earth science research activities, including measurements, retrievals, data analysis, model simulations and calibration/validation. Office personnel collaborate with scientists and engineers at other NASA centers, universities and government agencies, both national and international.

Orbital Tracking

The Wallops Orbital Tracking Station provides around the clock support for many of NASA’s low-Earth orbiting spacecraft.

Interagency, Industry and Educational Support

Other government agencies located at Wallops are the U.S. Navy, U.S. Coast Guard, National Oceanic and Atmospheric Administration and the Mid-Atlantic Regional Spaceport. Located nearby are the Chincoteague Bay Field Station, the National Park Service, the U.S. Fish and Wildlife Service and the Virginia Space Flight Academy. These agencies share resources to carry out their missions.

NASA also opens its facilities to industry for space and aeronautics research. During the past 25 years, NASA Wallops has collaborated with more than 50 established and emerging aerospace companies.