

NASA WALLOPS FLIGHT FACILITY

<http://www.wff.nasa.gov/about/>

NASA Goddard Space Flight Center's Wallops Flight Facility, located on Virginia's Eastern Shore, was established in 1945 by the National Advisory Committee for Aeronautics, as a center for aeronautic research. Normal operating hours are Monday through Friday, 6 AM to 6 PM.

Wallops is now NASA's principal facility for management and implementation of suborbital research programs. The Wallops Mission Plan includes the following objectives:

- To help achieve NASA's strategic objectives for scientific and educational excellence through cost efficient integration, launch, and operations of suborbital and small orbital payloads.
- To enable scientific, educational, and economic advancement by providing the facilities and expertise to enable frequent flight opportunities for a diverse customer base.
- To serve as a key facility for operational test, integration, and certification of NASA and commercial next-generation, low-cost orbital launch technologies.
- To pioneer productive and innovative government, industry, and academic partnerships.

The research and responsibilities of Wallops Flight Facility are centered on the philosophy of providing a fast, low cost, highly flexible and safe response to meet the needs of the United States' aerospace technology interests and science research. The 1000 full-time Civil Service and contractor NASA Wallops employees act as a team to accomplish our mission in the spirit of this philosophy.

NASA also opens its unique facilities to industry for space and aeronautics research. Wallops expects an increase in commercial launch activity in the very near future.

Capabilities

Wallops Flight Facility offers academic, government and commercial organizations state-of-the-art facilities and the expertise of our people.

With more than 50 years experience conducting suborbital projects, our staff are the experts. We're highly skilled in engineering, radar, project management, mobile campaigns and so much more. Our staff includes scientists, photographers, pilots, project managers and technicians. Whether operating our onsite instrumentation or traveling the world with our unique mobile facilities, we support researchers wherever the science takes them.

Wallops' permanent facilities support NASA's Sounding Rocket and Balloon Programs. We also track the Mir space station and NASA's Space Shuttle missions using our communications, telemetry and radar facilities.

Our launch range and research airport have access to virtually unrestricted airspace. The Wallops restricted area (R-6604) connects Wallops and the Mid-Atlantic Test Range warning area. An extended area can be coordinated with governing agencies to meet specific mission requirements. Because of our location, air traffic is minimal.

Wallops offers a wide array of launch vehicle trajectory options. In general, we can accommodate launch azimuths between 90 and 160 degrees depending on impact ranges. For most orbital vehicles, this translates into orbital inclinations between 38 and approximately 60 degrees. Trajectory options outside of these launch azimuths, including polar and sun-synchronous orbits, can be achieved by in-flight azimuth maneuvers.

We welcome researchers from academia, the private sector and government agencies. Two commercial launch pads provide support to commercial clients through the Virginia Space Flight Center that resides at Wallops and our research airport supports aircraft-launched rockets. We also support our many customers with on a variety of services and facilities during the planning, execution and data analysis phases of their projects.

Research Facilities

Wallops is committed to excellence in scientific investigation, in the development and operation of space systems and in the advancement of essential technologies. We are a test facility for the development, launch and data collection of NASA sensors. We also conduct a number of microgravity experiments that test the effects of weightlessness on humans, objects and technology.

Wallops is one of the premier sites for theoretical and experimental research on observational systems and techniques associated with hydrospheric processes. Most of our efforts are related to the broad study of Earth science and global change.

Wallops scientists plan and conduct laboratory and field measurements to improve the fundamental knowledge of remote sensing, evaluate sensor systems and quantify performance. Our scientists manage advanced planning, design and flight performance analysis of Earth-sensing spacecraft instruments.

Wallops research facilities include wave tanks; laboratory field standards; aircraft in-situ and remote sensors; ground-, balloon- and rocket-based ozone detectors; and balloon- and rocket-borne meteorological instruments and systems. We maintain engineering laboratories to design and develop new sensor and data

acquisition systems. These facilities obtain high quality measurements that support the development of theories and new sensors, get key scientific data and verify the performance and calibration of spacecraft instruments.

Facilities:

- Laboratory for Hydrospheric Processes
- Atmospheric Sciences Research Facility
- Air-Sea Interaction Research Facility
- Rain-Sea Interaction Facility