

A Productive Alliance

Virginia and NASA

Virginia plays an integral role in NASA's mission. Over the years, successful partnerships between NASA and Virginia's industry and academia have benefited the Old Dominion State, the U.S. Space Program, and America's continuing quest to explore our universe and better our lives here on Earth. **Langley Research Center** (LaRC) in Hampton uses wind tunnels, simulators, laboratories, and experimental aircraft to enhance further the Nation's aerospace research. **Wallops Flight Facility** (WFF) on Wallops Island performs suborbital and small orbital flight projects, Earth science research, and technology development.

Virginia's Role in Project Constellation

NASA continues to foster its strong relationship with Virginia's academic, business, and industry sectors as we continue to bring Project Constellation to reality. Building on the successes of the Apollo and Space Shuttle missions, the Orion Crew Exploration Vehicle and the Ares I & V rockets will be the next generation space vehicles that will return

humans to the moon and later take them to Mars and other destinations.

LaRC is the lead Center for Ares I's aerodynamic characterization of integrated launch vehicle stack, aerodynamic database development, and aeroelasticity test and analysis. It is also the lead for vehicle integration activities and crew module and launch abort simulator design and fabrication for Ares I-X. The Center supports structural design and analysis, guidance, navigation and control development, and flight mechanics and trajectory analyses. LaRC also supports systems engineering and upper stage design, development, testing and engineering.

GeoLogics Corp. in Alexandria and **Aerojet Corp.** in Gainesville are working on the Upper Stage component of the Ares I Launch Vehicle. **Integrated Concepts** in Alexandria, **Wessex Inc.** in Blacksburg, and **DLT Solutions Inc.** in Herndon are working on the Ares I rocket's Upper Stage J-2X Engine. **Valador Inc.** in Herndon and **Booz Allen & Hamilton** in McLean are working on Vehicle Integration.

NASA and Virginia



Educating, Innovating, and Exploring

Nurturing education—and educators— aids NASA missions and provides incalculable value to Virginia's youth. Through these efforts, NASA powers inspiration that encourages future generations to explore, learn, and build a better future. The Agency's emphasis on education is seen through its generous commitments to educational institutions in the state.

Space Grant Consortium

NASA's academic grants and contracts fund a variety of programs in Virginia including research, education, and outreach. **Old Dominion University** is part of the Space Grant Consortium, a coalition between NASA, Virginia colleges and universities, and other institutions representing aerospace education and research activities.

NASA Explorer Schools in Virginia

NASA supports preparatory education through the NASA Explorer Schools (NES) program. The NES program establishes a three-year partnership between NASA and local schools to bring NASA's engaging mathematics, science, and technology learning to educators, students, and families. Currently, **Kate Waller Barrett Elementary** in Arlington; **Chesterfield Elementary School**, **Oceanair Elementary School**, **Jacox Elementary School**, and **Campostella Elementary School** in Norfolk; **Arcadia Middle School** in Oak Hall, and **John B. Cary** in Richmond are participating in the program. **Martinsville Middle School** in Martinsville is a previous participant.

Commercialized NASA Technology

NASA's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs allow small businesses to

develop technologies specific to NASA mission-driven needs. The following companies receive funding through SBIR and STTR: **AEROPROBE**, **AVEC, Inc.**, **Nanosonic, Inc.**, **Nuvotronics, LLC**, and **Phoenix Integration** in Blacksburg, **WxAnalyst, LTD** in Burke, **Barron Associates, Inc.**, **Cellular Materials International, Inc.**, and **Virginia Diodes, Inc.** in Charlottesville, **MicroXact, Inc.** in Christiansburg, **International Scientific Technologies, Inc.** in Dublin, **Materials Modification, Inc.** in Fairfax, **Fibertek, Inc.** and **Zron Networks, Inc.** in Herndon, **Mosaic ATM, Inc.** in Leesburg, **Bear Engineering** in Maidens, **Aurora Flight Sciences Corporation**, **NAL Research Corporation**, **Progeny Systems Corporation**, and **UTRON, Inc.** in Manassas, **Aerotech Research** and **GATS, Inc.** in Newport News, **Parabon Computation, Inc.** in Reston, **Luna Innovations Incorporated** in Roanoke, and **Aerospace Innovations, LLC** in Yorktown.

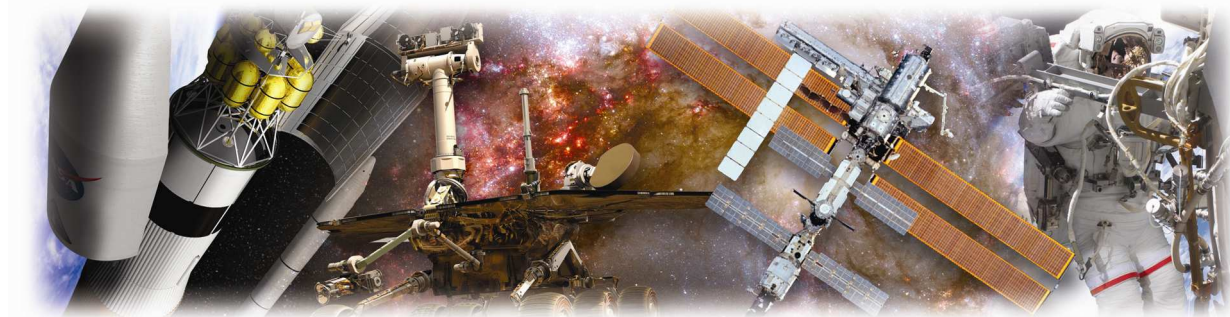
Astronauts with ties to Virginia

Current: Dr. Charles Camarda; Col. Catherine Coleman; Col. Patrick Forrester; Dr. Thomas Marshburn; Mr. Leland Melvin; Dr. John Phillips; Dr. Robert Satcher, Jr.

Former: Col. John Blaha; Col. Michael Bloomfield; Capt. Kenneth Bowersox; Maj. Gen. Roy Bridges, Jr.; Capt. David Brown†; Dr. Roger Crouch; Cmdr. Joe Edwards, Jr.; Mr. Guy Gardner; Dr. Karl Henize*; Capt. Wendy Lawrence; Mr. David Low; Rep. Bill Nelson; Cmdr. William Oefelein; Capt. William Readdy; Capt. Kenneth Reightler, Jr.; Dr. Kathryn Thornton; Cmdr. Pierre Thuot; Dr. Peter "Jeff" Wisoff

* Deceased

† Died in the line of duty



Fiscal Year 2008 Obligations

Total Obligations for Virginia

Business	\$628,735,641
Large Business	\$405,915,565
Small Business	\$222,820,076
Small Disadvantaged Business	\$57,092,248
8(a) Program	\$23,174,259
Woman Owned Business	\$54,939,019
Small Business Innovative Research	\$6,369,808
Education	\$35,083,466
Historically Black Colleges and Universities	\$4,149,228
Government	\$4,972,591
Non-Profit Institutions	\$35,040,285

Virginia-Based NASA Business Contracts Exceeding \$34.3M

Contractor	Location	Contracts	Obligations
The Cube Corporation	Wallops Island	1	\$34,321,409
Jacobs Technology	Hampton	7	\$91,397,086
Northrop Grumman	Fairfax and Herndon	6	\$35,392,288
Orbital Sciences Corporation	Sterling	3	\$111,172,679
Science Systems and Applications	Hampton	1	\$37,271,659
Swales and Associates	Hampton	122	\$47,663,391

Virginia-Based NASA Education Funding Exceeding \$1M

School	Location	Obligations
College of William and Mary	Gloucester Point and Williamsburg	\$1,004,957
George Mason University	Fairfax	\$10,515,046
National Institute of Aerospace Associates	Hampton	\$7,565,896
Old Dominion University	Norfolk	\$2,951,706
University Of Virginia	Charlottesville	\$4,471,509
Virginia Polytechnic Institute and State University	Blacksburg	\$1,720,087

For more procurement data, visit <http://prod.nais.nasa.gov/cgi-bin/npms/map.cgi>.



National Aeronautics and Space Administration

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