Space Technologies

SNC has a long heritage of providing thousands of successful systems, subsystems, and mission components for spacecraft throughout the solar system. We have grown to become a global supplier of choice, offering an ever-expanding portfolio of space-rated products including power system components such as solar arrays and solar array drive assemblies and RF – radio frequency, low-jitter motion control systems, launch adapters and separation systems. Our more than 200,000 sq. ft. of office and manufacturing space and state-of-the-art testing facilities allow us to deliver products on-time and with confidence. Some of our verification capabilities include vibration, thermal-vacuum, large area pulsed solar simulation, shock, RF, stiffness, motor/actuator speed-torque-accuracy, line-of-sight micro-motion jitter testing and functional testing.

Space Exploration Systems

Dream Chaser® Spacecraft
One of the most innovative solutions we are developing is the Dream Chaser, a multi-mission vehicle capable of transporting crew and cargo to low-Earth orbit (LEO) destinations. The cargo variant was selected by NASA to complete at least six missions to the International Space Station under the Commercial Resupply Services 2 award. We are engaged with both domestic and international customers to create additional flight opportunities in LEO.

Lunar Orbital Platform – Gateway
SNC is developing a Lunar Orbital Platform – Gateway concept under NASA’s Next Space Technologies for Exploration Partnerships 2 (NextSTEP-2) program. Our architecture supports both crewed and autonomous lunar orbit activities and surface operations.

Spacecraft Systems

Sierra Nevada Corporation (SNC) has the engineering talent and skill sets to develop innovative space mission solutions for a diverse range of customer needs. With experience in payload, bus, launch, and ground systems, we bring the paradigm-changing mindset of a new space company backed by more than 50 years of performance as an established aerospace prime. Our space and near-space platforms can support missions such as communication, imaging, science and technology demonstration. Our low-Earth, middle-Earth, and geostationary orbit bus architectures support payloads from 50 – 300 kg, that require up to several kW peak power. Our Louisville, Colorado facility supports all phases of space mission design, vehicle assembly, integration and testing.

Propulsion & Environmental Systems

We have a wide variety of capabilities in propulsion and environmental systems. We are focused on the development and demonstration of innovative, low-cost components for liquid and hybrid propulsion systems, including the patented VORTEX™ engine. We are also dedicated to creating the next generation of bio-agricultural products through system and service solutions that increase plant productivity on Earth and in space. Our unique capabilities stem from decades of research in environmental control in partnership with NASA and are optimized for growth of plant-made pharmaceuticals, industrial products, and high-yield crops through lighting, control systems, automation and growth services. Our work with NASA to create the VEGGIE and Advanced Plant Habitat (APH) systems on the International Space Station is helping scientists understand more about plants and give critical insight into growing fresh food in space for long-duration travel.
SNC has more than 30 years of experience providing spacecraft, satellite, propulsion, space technologies and human support system solutions. Based in Louisville, Colorado, SNC's Space Systems business area focuses on the needs of U.S. government, commercial and international customers. We have been involved in more than 450 successful space missions and have delivered 4,000+ systems, subsystems and components for spacecraft throughout the solar system.