SNC has more than 30 years of experience providing spacecraft, satellites, propulsion systems, 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 missions throughout the solar system.
Space Technologies

SNC has a long heritage of providing thousands of successful systems, subsystems and mission components for spacecraft throughout the solar system. As a global supplier of choice, we offer an ever-expanding portfolio of space-rated products including power system components such as solar arrays, solar array drive assemblies, Radio Frequency (RF), low-jitter motion control systems, launch adapters and separation systems. SNC also provides state-of-the-art Surface Mount Technology solar arrays, which drastically cut the cost and time it takes to produce solar panels. We deliver products on-time and with confidence using more than 200,000 sq. ft of office and manufacturing space and advanced testing facilities. 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.

Satellite & Space Mission Systems

SNC provides innovative space mission solutions for a diverse range of customer needs from remote sensing to communications for civil, commercial and defense customers. With 50+ years of performance as an established aerospace prime, our engineering and manufacturing expertise in spacecraft, payloads, launch and ground elements, off-orbit paradigm-changing space solutions. Our space and near-space solutions support operational communications, imaging, science and technology demonstrations. SNC’s low-Earth, medium-Earth and geostationary orbit bus architectures support various payload sizes and missions. In our Louisville, Colorado facility, we can support all phases of space mission design, vehicle assembly, integration, testing and flight operations.

Propulsion & Environmental Systems

SNC has 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. Our engineers 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 NASA partners 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.

Space Exploration Systems

Dream Chaser® Spaceplane

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. NASA selected the cargo system to complete at least six missions to the International Space Station. Dream Chaser also utilizes Shooting Star transport vehicle which increases cargo capacity and mission flexibility. We are engaged with both domestic and international customers to create additional flight opportunities in LEO.

Gateway Architecture – Moon, Mars & Beyond

Sierra Nevada Corporation (SNC) has been supporting NASA’s Gateway Architecture development under NASA’s Next Space Technologies for Exploration Partnerships 2 (NextSTEP-2) program. Our architecture supports both crewed and autonomous missions to explore the moon and prepare for longer duration missions such as going to Mars.