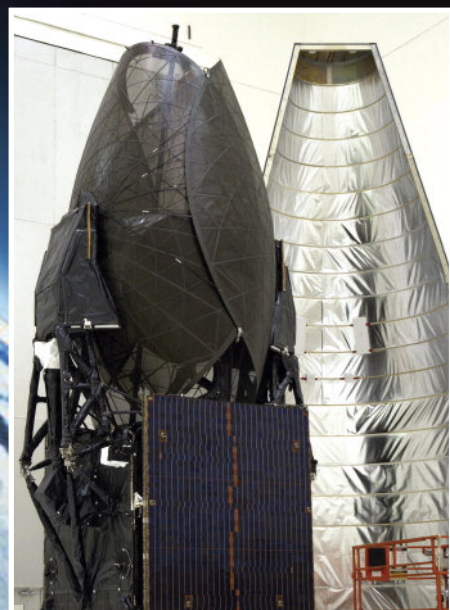




# ***SPECIAL AEROSPACE SERVICES***

Providing Innovative Aerospace Services and Solutions for the Next Generation





*“Dreams are the seeds of innovation; first we dream, then we calculate, then we innovate.”*

*— Tim Bulk, Co-founder of Special Aerospace Services*

## **SAS Core Capabilities**

### **Program Management**

International Business Services

- Specializing in technical interfacing with Russian and Ukrainian design bureaus
- Understanding foreign-designed systems

Advisory services with an experienced team of aerospace professionals

Strategic Planning and New Business Development

Facilitate Teaming and Partnerships

### **Engineering Services**

Industry-leading Space Systems Engineering Staff, providing

Requirements management and Integration Analysis

- Ground Systems
- Launch Systems
- Space Systems

Launch Vehicle Certification — NASA, Independent Validation — Air Force, and FAA Commercial Space Guidelines

Space System Human Rating

Launch System Development and Payload Integration Processes

Conceptual Design-Systems, Sensors, and Solutions

International Strategic Threat Reduction and Foreign

Technology Assessment

### **Mission Assurance Services**

Tactical Assurance-Audit Process

Mission Safety

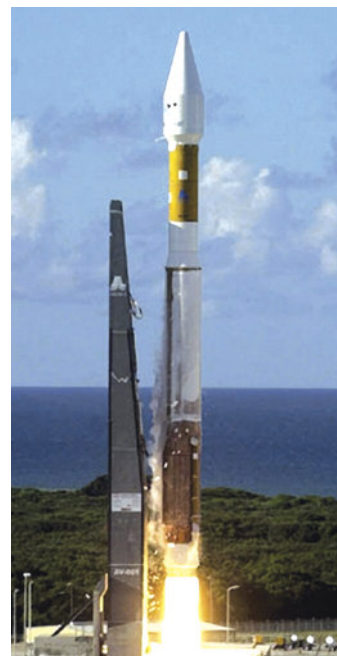
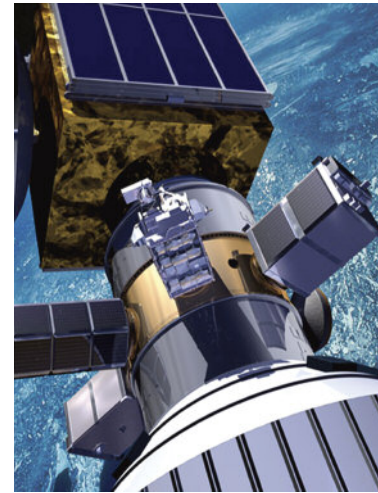
Risk and Reliability Analysis

Software Assurance and IVV

**Spaceflight Safety™** Services and Products

*“First, inevitably, the idea, the fantasy, the fairy tale. Then, scientific calculation. Ultimately, fulfillment crowns the dream.”*

*— Konstantin Tsiolkovsky, 1926*



Cover photos courtesy of NASA Kennedy Space Center

## **SAS Experience**

**SAS** team member experience includes major NASA, Air Force and Industry Programs (Orbital Space Plane, Launch Services, EELV, NASA's Constellation Program, COTS).

**SAS** team members have worked on every U.S. and foreign-developed launch system including:

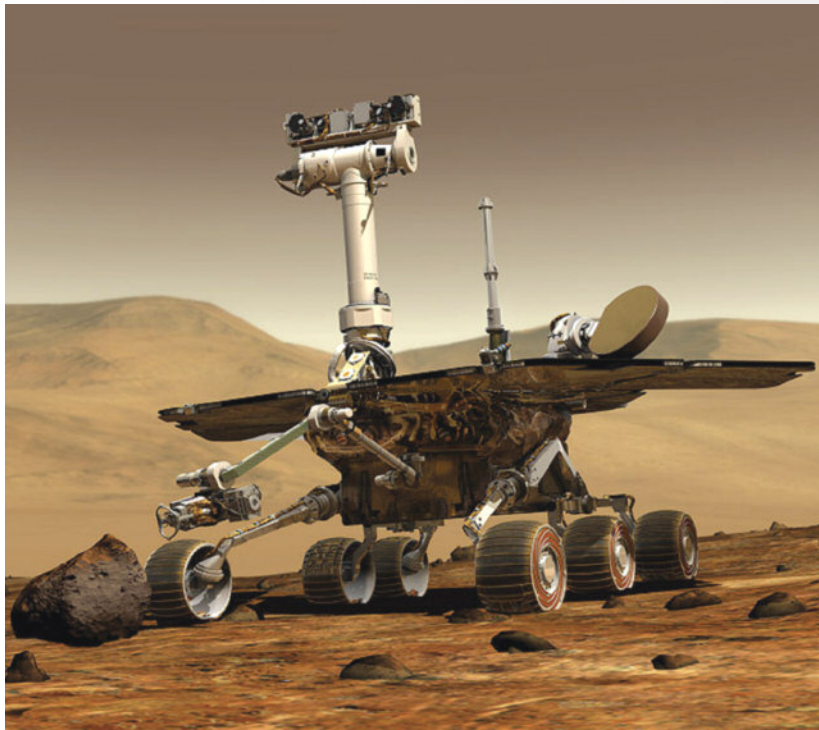
- Athena, Atlas (II, IIA, IIAS, IIIAB, V), Delta II, IV, Falcon (I, IX), Pegasus, Taurus, and Zenit

**SAS** team members have successfully certified and performed IV and V on launch systems for NASA and National Security Payloads

- Successful missions have been Mars Reconnaissance Orbiter, Pluto New Horizons, and 30+ LEO and Planetary missions

**SAS** team members have supported launch site development, activation, and critical launches from all U.S. launch sites (ETR, WTR, Kodiak, Kwajalein, and Wallops)

- Demilitarization and Threat Assessment (SS-18, SS-19, SS-24, SS-25, SS-N-20)



*“When old dreams die, new ones come to take their place.  
God pity a one-dream man.”*

*– Esther Goddard, reading from her late husband's diary to the AP prior to the launch of Apollo 11.*



## **International Business Services**

**SAS** maintains a core team of individuals with extensive experience and relationships in Russian- and Western Europe-developed hardware systems. These systems and services include:

- Russian-designed propulsion systems
- Structures
- Avionics
- Spacecraft Integration
- Launch Systems (both civil and military)
- Demilitarization and Threat Assessment (SS-18, SS-19, SS-24, SS-25, SS-N-20)

**SAS** provides services related to ITAR and Export control, Technical Assistance Agreements, Technology Control Plans, and Licensing.

- Business and Technical Intelligence
- Technical Translation

## **Extensive Hardware Development**

**SAS** team members have worked on the following hardware integration and development programs:

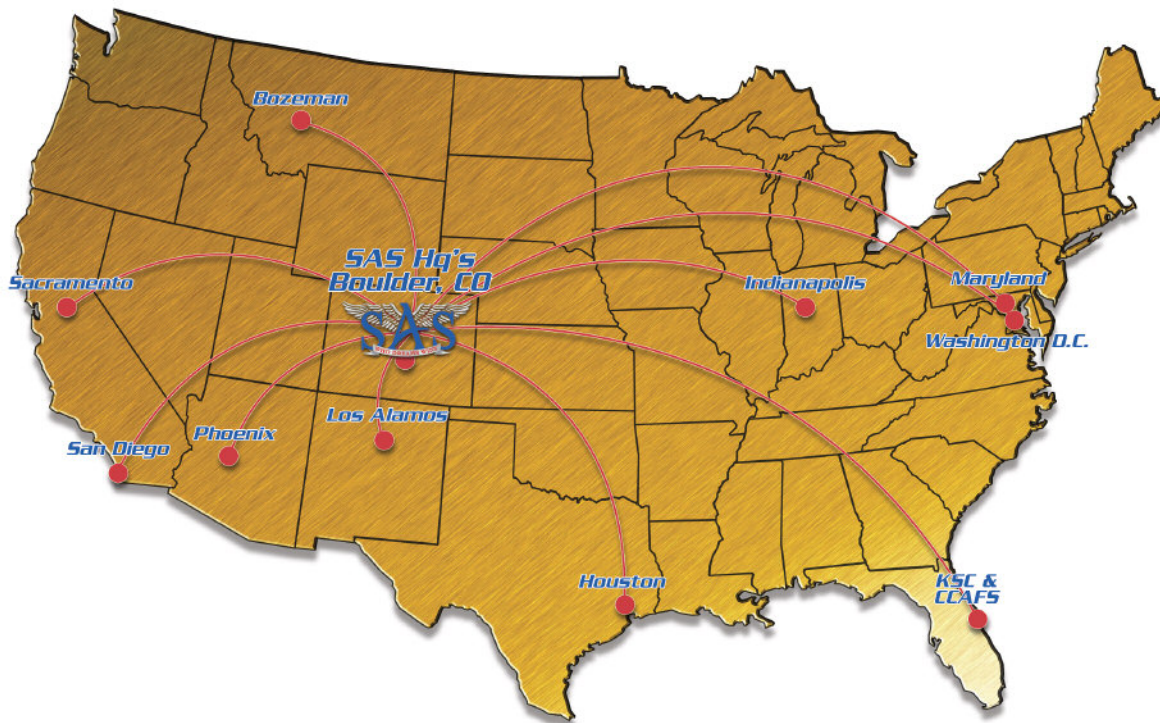
- NK-33 U.S. Hot Fire Program
- RD-180 Hot Fire and Integration (Atlas III and V)
- Apollo, Skylab, International Space Station, and Shuttle processing
- NASA Launch Services Payload Integration
- Athena, Falcon I and small LV solid and hybrid engine technology
- Secondary Payload Integration
- Launch Site Development (LC41, LC37, and Kodiak)
- NASA and Air Force Advanced Programs

**SAS** hardware experience covers U.S., Russian-, and European-designed systems.

## SAS Nationwide Support

SAS has technical support team members in key areas across the country.

We support our clients at their facilities and their remote locations.



*“Hold fast to dreams, for if dreams die life is a broken winged bird that cannot fly.”*

— Langston Hughes

## Why SAS Makes Sense

- Understanding of new space initiatives and policy
- Highly experienced team—NASA/Air Force/FAA/NRO/Missile Defense Agency/DoD
  - We provide access and facilitate relationships
- Extensive spacecraft/launch vehicle hardware development experience
- Experienced Launch Vehicle Operations Development Team
- International business services—Russia, Ukraine, and Western Europe
- Agile, efficient, and effective
- Small, woman-owned disadvantaged business, mentor protégé opportunities and teaming arrangements

## Contact Information:

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Boulder, CO 80302  
303-625-1010

Mailing Address:

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[www.specialaerospaceservices.com](http://www.specialaerospaceservices.com)

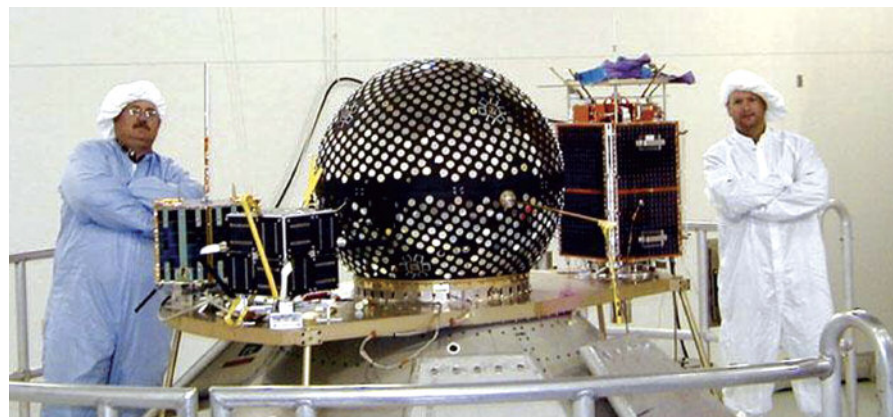


Photo courtesy of NASA Kennedy Space Center