Alpha Space Test & Research Alliance, LLC (Alpha Space) owns and operates the MISSE, an orbiting commercial science and test facility permanently installed on the exterior of the International Space Station (ISS). Alpha Space, a woman- and minority-owned company, serves the Space Research, Testing, and Materials Science communities with a routine, turn-key, fixed price service that makes getting science and test elements safely into space, and data and materials back to earth, as simple and inexpensive as possible. We offer flight and return opportunities approximately every six months. If it fits, it flies.

The Materials International Space Station Experiment (MISSE) flight facility gives researchers and engineers unprecedented access to space for experiments and tests that benefit space systems and on-earth applications alike. MISSE is fixed to the exterior of the ISS where experiments endure extreme levels of solar radiation, charged-particle radiation, orbital debris, atomic oxygen, hard vacuum, and temperature extremes. MISSE yields fast and accurate testing results that speed understanding and technical maturity for products and experiments ranging from materials to biological samples to mechanisms and electronics.

Whether you are NASA, a commercial company or an individual, Alpha Space has space for you. And you only need to work with Alpha Space in order to launch. Through our privately-owned MISSE Facility, you can send your payload or experiment to the ISS and evaluate the performance, stability, and long-term survivability of materials, components and small systems, and get it back after its flight.
Have a Flight Test You’d Like to Discuss?

It’s This Easy to Fly with Alpha Space

Make Contact
Call us. Email us. Contact us through our website.

Complete Paperwork
We will work with you to complete all needed paperwork. This includes an NDA, Tech Info Exchange, Quote, and Standard Contract.

Integration & Preparation
During this phase, our experienced and dedicated team will integrate and prepare your sample or experiment for launch.

On Orbit
On orbit, your sample or experiment will be in its identified location on MISSE, receiving standard services and selected optional services.

Launch
We have liftoff! Your sample or experiment makes its journey to the MISSE on the ISS.

Return
Your property is returned to you as soon as possible, depending on return vehicle.

Every Six Months

~2 months | Return
Your property is returned to you as soon as possible, depending on return vehicle.

6+ months | On Orbit
On orbit, your sample or experiment will be in its identified location on MISSE, receiving standard services and selected optional services.

2-4 weeks | Complete Paperwork
We will work with you to complete all needed paperwork. This includes an NDA, Tech Info Exchange, Quote, and Standard Contract.

3-6 months | Integration & Preparation
During this phase, our experienced and dedicated team will integrate and prepare your sample or experiment for launch.

Our Flight Facility
Depicted is the MISSE flight facility on the ISS. This is where your sample, experiment, or product will be located.

MISSE Services

LOCATION ON MISSE
Choose your ISS space environment. Each provides a different specific environment:
• Ram facing (Flight direction)
• Wake facing (Opposite Ram)
• Zenith facing (Upward)
• Nadir facing (Downward)
• Under Deck

STANDARD SERVICES
Pre-Flight:
• Integration of samples in 10k clean room
• Environmental testing of samples (in-house thermal-vac)
• Integration, safety, and verification through NASA process
• Launch service coordination

On-Orbit:
• Monthly high definition photographs
• Real time contamination and thermal data collection, mapped to ISS location and attitude (monthly file delivery)

Return & Post-Flight:
• Return samples to earth
• De-integrate samples
• Package and return samples to client

OPTIONAL SERVICES
• Power and data for active experiments
• Additional photographs
• Additional sensor services including radiation, UV, atomic oxygen
• Ground services including pure gas purges, special storage, and special handling
• Engineering services for payload or experiment design support
• Real time data delivered in client facility, providing maximum flexible planning and command control through a telescience client application

Visit the Alpha Space website to learn more.

Our Flight Facility
Depicted is the MISSE flight facility on the ISS. This is where your sample, experiment, or product will be located.

Doing Business with Alpha Space
Alpha Space offers the easiest, lowest-priced access to space available on the market today. Alpha Space takes care of everything, from integration to test, from data collection to return after flight. And your data is yours – Alpha Space offers strict confidentiality to our customers.

Flight Opportunities
Flight and return opportunities are approximately every six months.

Visit the Alpha Space website to learn more.