PROTEUS SPACE™

CAPABILITY STATEMENT

UEI KHKZCUJJ1BL5

NAICS 336414 (primary), 541715

Small business, non-traditional · SBIR/STTR Phase III eligible

LOS ANGELES, CA · NOVEMBER 2026

Rapid, payload-tailored spacecraft design and fast first-flight programs

Proteus is our AI-enabled, automated computational engineering and MBSE platform that rapidly designs the spacecraft around the payload(s) and the mission objectives, instead of forcing the payload(s) onto a standard bus. It uses no machine learning or LLMs: design is deterministic and physics-anchored on a curated flight-heritage component database. This enables faster and more reliable custom bus designs, unlocking mission objectives by finding the edge-case designs where first-of-a-kind missions close. All within an air-gapped tool chain in a Proteus-owned AWS GovCloud environment, enabling rapid AI&T, utilizing TRL9 subsystems and machined metal parts.

AT A GLANCE

HEADQUARTERS	Downtown Los Angeles (30 min from LAX)
TEAM	JPL, Caltech, DoD and IC veterans
BUSINESS	Small, non-traditional SBIR/STTR Phase III eligible
FLIGHT HERITAGE	TRL9, on orbit since Nov 2025
CUSTOMERS	MDA, NASA, AFRL-RV, primes
SECURITY	Air-gapped AWS GovCloud platform

THE ADVANTAGE

Standardized spacecraft buses force payload and mission compromises and add bus-to-payload integration NRE, driving program cost and schedule overruns. Proteus solves that. **Spend about 30 minutes discussing mission objectives and payloads, and Proteus generates thousands of mission-closing custom spacecraft designs and TRL9 BOMs in minutes.** Each comes with quick visibility into blank-sheet-to-orbit cost and schedule estimates. Engineers select the payload-integrated spacecraft designs to mature; customers own every engineering deliverable and the CAD.

TECHNICAL DIFFERENTIATION · THREE PILLARS NO COMPETITOR COMBINES

01

INSTANT SUPPLY CHAIN INTELLIGENCE

Proprietary database of flight heritage spacecraft components from allied suppliers, curated by experienced space professionals. Costs, lead times, heritage, HIL bench-test results, and alternatives, with characterized uncertainties and automated risk matrices.

02

RAPID CONCURRENT AUTOMATED MULTI-OBJECTIVE ENGINEERING

Deterministic, physics-anchored, industry-trusted methods find the edge-case designs where first-of-a-kind missions close. Automated CAD, high-fidelity structural design, FEM, thermal and jitter, with instant AoA and trade visualizations.

03

RAPID GROUND HW/SW TESTING AND MISSION ASSURANCE

Proteus-defined software and hardware-in-the-loop ground-test campaigns. Test, fail, learn, iterate, fast. Payloads are installed, not integrated. Accelerated AI&T and daily MA deliver faster, more reliable paths to orbit.

CAPABILITIES

SPACECRAFT CLASS	ESPA Grande and below, rideshare class, including ultra-low SWaP novel systems
MISSION TYPES	Heliophysics/magnetically clean, missile track and warning, GEO rendezvous-proximity operations and on-orbit refueling, proliferated LEO, technology demonstration, cis-lunar, SEL, other challenging mission types
MISSION CLASS	Tailored Class C/D
ORBIT REGIMES	Custom radiation-tolerant designs
ENGINEERING STACK	Deterministic, physics-anchored
FACILITIES	Full on-site Class 10K clean rooms and multi-unit AI&T up to ESPA Grande with in-house secure Mission Ops
COMPLIANCE	CUI, Export Control compliant, NASA/MIL-STD Mission Assurance Designed to NASA GSFC standards (e.g., GSFC-STD-1000 GOLD Rules)

The Future Is Faster™

© 2026 Proteus Space. All rights reserved.

PROTEUS SPACE

CAPABILITY STATEMENT

UEI KHKZCUJJ1BL5

NAICS 336414 (primary), 541715

Small business, non-traditional · SBIR/STTR Phase III eligible

LOS ANGELES, CA · NOVEMBER 2026

PDR-LEVEL INDUSTRY-STANDARD ENGINEERING DELIVERABLES IN AS LITTLE AS 60 DAYS FROM CLEAN-SHEET KICKOFF TO PDR

Government Purpose Rights deliverables. B2B: Customer owns the deliverables.

SYSTEMS & MISSION

- Mission-closing analysis
- Visualization of all closing designs
- Analysis of alternatives
- Preliminary block diagram
- Preliminary thermal assessment

MECHANICAL & STRUCTURAL

- Payload-integrated spacecraft CAD
- Structural design with detailed FE-model
- Mass properties (mass, CG, MOI)
- Jitter analysis (optional)

ORBITAL & OPERATIONS

- Orbit model and Delta-V budget
- Launch options
- LEOP and operations concept
- Mission-tailored link budget

POWER

- Power budget
- Battery charging simulation
- Attitude and power modeling

Plus a manufacturing package.

FLIGHT HERITAGE

MERCURY ONE: blank sheet to a launch qualified ESPA-class spacecraft in 9 months, operating nominally on orbit since November 2025. Payloads flown for NASA JPL, Leonardo DRS, and UC Davis, with AI&T under a SpaceWERX and AFRL contract.

END-TO-END MISSION PROVIDER - OR A LA CARTE

Rapid payload-tailored custom bus design, bus and payload AI&T, FCC licensing, insurance, launch brokering, launch integration, in-house LEOPs and operations.

PAYLOAD AND MISSION CO-DEVELOPMENT

Unique cross-discipline expertise for demanding, first-of-kind missions. Proven past performance co-developing challenging payloads and missions from TRL3 to TRL9.

ACQUISITION PATHWAYS

- **SBIR/STTR Phase III direct-award eligible** under FAR 6.103-5, based on four AFRL SBIR/STTR awards (FA864924P0273, FA864924P0474, FA864924P1117, FA945325CX047) for full-scope blank-sheet spacecraft digital design, modeling, and AI&T, launch, licensing, on-orbit commissioning and operations.
- **Prime contractor on the MDA SHIELD MA-IDIQ** (HQ085926DF420).
- **In-Q-Tel:** IQT government partners may MIPR funds to IQT for a sole-source acquisition pathway.

> *Proteus accelerated on-orbit testing to meet critical market timelines by integrating our payload after PDR without any cost or schedule impacts.*
>
> JOHN CORBEAN, VICE PRESIDENT OF ADVANCED TECHNOLOGIES, LEONARDO DRS

CUSTOMERS

NASA · DRAPER · iqt · Missile Defense Agency · United States Space Force · United States Space Command · AFRL · NASA JPL · Leonardo DRS · Redwire · UC Davis University of California

David Kervin · Founder & CEO

Start a mission conversation: info@proteus-space.com

Tell us your payload and mission objectives.

proteus-space.com/contact

© 2026 Proteus Space. All rights reserved.