Predictive Insights for a Better Tomorrow

Space Systems / Space Derived R&D Capabilities

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OmniTeq

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Company Structure





INTELLIGENT DATA SOLUTIONS

- AThENA Platform
- Edge-Processing
- Advanced AI/ML
- Technical Services
- Real-Time Streaming
- DevSecOps
- Digital Twin (Visualization)
- Cognitive Assistant

SPACE DERIVED R&D

- Space Derived Data Technologies
- Compressively Enhanced SAR (CE-SAR)
- Intensity Correlation Imaging
- Noise Radar

SPACE SYSTEMS

- Spacecraft Engineering Design Team
- Launch & Deployment Systems
- Space Hardware Development
- Mission Integration & Operations Team



Space Systems Overview

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Space Systems Highlights

- Proven spacecraft engineering design and development team in building launch and deployment systems for rideshare missions, human-rated vehicles and habitats
- Designed, developed and deployed two launch systems that service LEO and Sunsync orbits with 100% mission success
 - 29 Spacecraft flown since 2019 / 135U
- Developed multiple launch vehicle agnostic deployment and sep system products
- Seasoned Mission Integration & Operations Team
 - Providing Mission Integration Services for 5 SpaceX Transporter Missions between June 2022 – January 2023
 - Supporting first ABL mission in Kodiak with OmniTeq Equalizer Deployers and Proprietary Spacecraft Developed by the R&D Team
- Florida Integration Facility with Clean Room conveniently located near SpaceX Payload Processing Facility
- Multiple commercial and DoD customers with ability to handle classified payloads
- Notable Contract Wins: NASA VADR (5 year / \$300M, IDIQ), GSA (no ceiling), NASA JSC IDIQ, AFRL CRADA and multiple mission contract wins
- Strong Intellectual Property portfolio





1st Mission Patch 2019

Space Systems



Space Systems Core Offering

Two Active Launch Systems Servicing Desired Orbits in LEO Specialized Mission Integration & Operations Team Launch Vehicle Agnostic Deployment & Separation System Hardware Solutions / Services Spacecraft Engineering Design & Manufacturing Payload Development & Integration, including Software Florida Payload Integration Facility with 100K Clean Room Proven Pedigree and trusted by USG with Personnel Clearances (No Foreign Ownership)

ENABLERS

Multiple Contract Vehicles

GSA | NASA VADR | NASA Services | AFRL – CRADA | DoD-Satellite Test Program

Our Launch & Deployment Capabilities

OmniTeq

NASA CRS Missions **SLINGSHOT**

- Up to 54U per Mission (1-12U Configs)
- Tab/Rail Agnostic
- Via Northrop Grumman Cygnus CRS Program
- Above station altitude 450km-500km
- Regular launch cadence
- Most reliable transportation system in the market today

LYNK

Rideshare Program OCTO-EQ

- Up to 96U
- Tab/rail Agnostic
- Regular launch cadence with SpaceX Rideshare & Other LV's
- 1U 16U Configurations

Rideshare Program OCTOBUS

- Orbital Transfer >2km/sec
- 300 kg payload
- Electric/Cold Gas Propulsion

Deployment Capabilities Equalizer CubeSat Deployer Rifle Sep System 15" / 24" *Flex Deployer *Space Trash System

*New Product Launch





U.S. NAVAI RESEARCH LABORATORY

Customers



U.S. AIR FORCE

Classified







Slingshot Overview



Slingshot

100% Mission Success Rate

- Six (6) Missions Flown to Date
- Initial Satellite Transportation to ISS via any Visiting Vehicles up to 4 Times per Year
- Uses ISS Cargo Launches the cargo is the primary payload
- Distributed Cargo Transportation *lower costs*
- Final Satellite Transportation to Deployment Orbit Uses Cygnus higher orbits up to 500 km/51.6° inclination
- Slingshot above ISS deploy (450+km) has been proven
- Slingshot flies as cargo to the ISS; soft, favorable ride with a human in the loop if needed prior to install and deploy
- Cygnus has a demonstrated fuel consumption profile ensuring above station deploy
- Hosted Payload capability to include FCC licensing coverage by Cygnus
- 1U to 12U Rail / Tab CubeSat Formats (ISIPOD XL)











Heritage Technology

- Utilizes SpaceX 24" port
- Accommodates up to 96U
- SpaceX Rideshare Missions to Sun Synchronous Orbit (SSO)





100% Mission Success on the 1st flight

OCTO-EQ debuted on SpaceX T5 mission



Formats Supported

- 1U to 16 U Tab and Rail Format Deployers
- Up to $7 \times 12U + 2 \times 6U$ Deployers (96U per 24-inch location)
- Supports SmallSat and CubeSats
- **Custom Deployer Builds Capability**

OctoBus Overview



Heritage Technology

- Utilizes Flight Proven Bus Components
- Hybrid Electric / Cold Gas Thruster Option
- Specifically Designed for 24" SpaceX Rideshare Missions
- Customizable Solar Panel / Battery System

Performance

- 300 kg Payload
- >2km/sec Delta V
- Scalable Solar Array to 1.5 kW
- Ultralightweight Composite Structure



Rifle Overview

Heritage Technology

- Utilizes Flight Proven HDRMs
- Accommodates ESPA Class Satellites
- Specifically Designed for SpaceX Rideshare Missions
- Customizable Springs/Connectors/Breakwire Switches









Formats Supported

- Range of separation nut combinations (3, 6, 9 or 12) to accommodate a variety of small satellite sizes
- Available bolt Circle diameters: 11.732", 15", 24".





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