



APPLIED
AEROSPACE & DEFENSE

**Engineered for Edge.
Trusted to Deliver.**

Advanced Manufacturing for Space & Defense

Our Mission

We unleash the power of advanced

manufacturing at scale

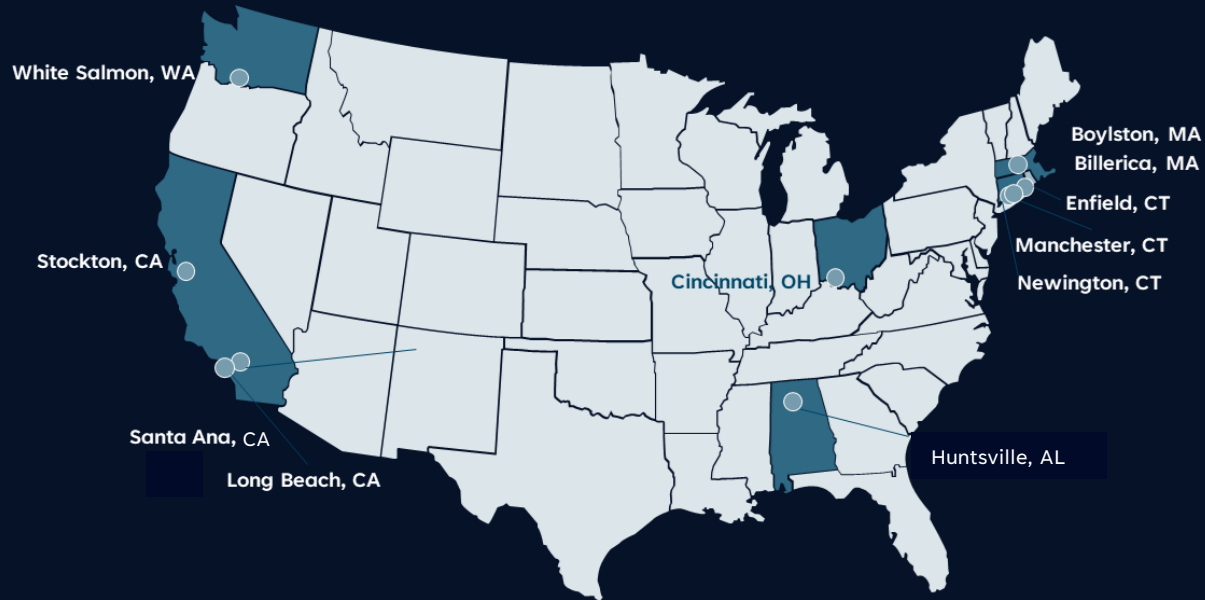
to enable *mission success*

for leading and *next-generation*

space and defense technology companies.



Applied At-A-Glance



1,500+
Professionals



200+
Engineers



11
Specialized
Facilities



1.5M+
Sq Ft of Production
Floorspace



120+
Years of
Experience



20+
Supplier
Excellence Awards

Specialized Infrastructure, Ready Capacity, and National Footprint



Advanced Manufacturing for Space & Defense

Space & Launch Systems



Exploration, Communications, Navigation, Earth Observation, Scientific Research

Defense Aviation & Airborne Systems



Air Dominance, Ground Attack, Electronic Warfare, Air-to-air Refueling, Transport

C5ISR & Precision Strike Systems



Forward Deployed and Stand-off Missions by Air, Land or Sea

High Consequence Platforms

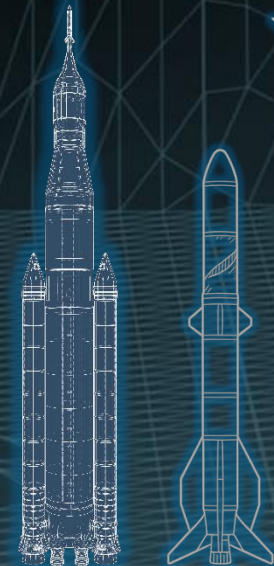
GEO, MEO, LEO
Satellites & Spacecraft

Mission Critical
Systems

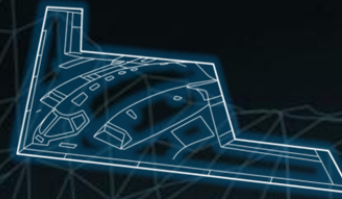
Unmatched
Performance

Extreme Operating
Environments

Defense Aviation &
Airborne Systems



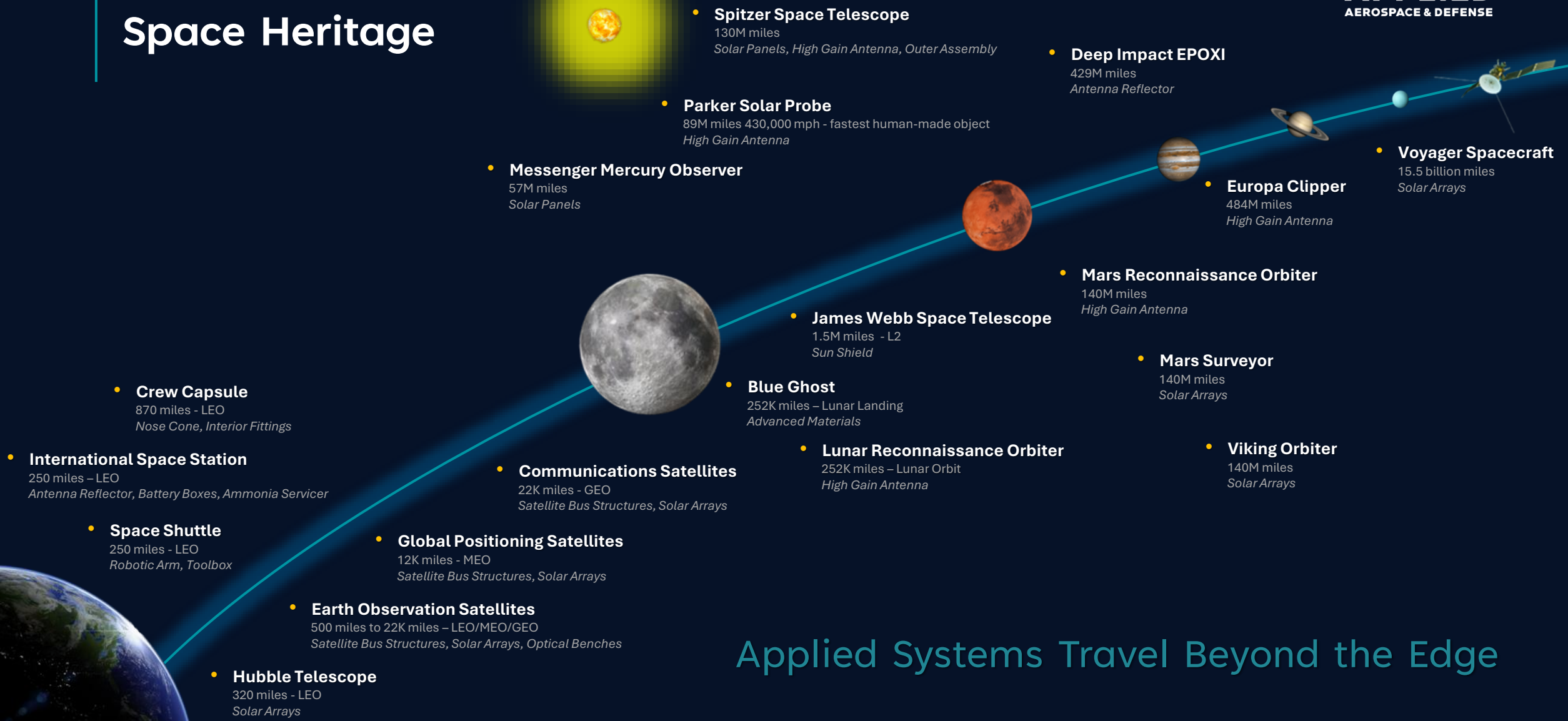
Crewed & Cargo
Launch Vehicles



C5ISR & Precision Strike



Space Heritage



- **Hubble Telescope**
320 miles - LEO
Solar Arrays

- **Earth Observation Satellites**
500 miles to 22K miles – LEO/MEO/GEO
Satellite Bus Structures, Solar Arrays, Optical Benches

- **Global Positioning Satellites**
12K miles - MEO
Satellite Bus Structures, Solar Arrays

- **Communications Satellites**
22K miles - GEO
Satellite Bus Structures, Solar Arrays

- **Space Shuttle**
250 miles - LEO
Robotic Arm, Toolbox

- **International Space Station**
250 miles – LEO
Antenna Reflector, Battery Boxes, Ammonia Servicer

- **Crew Capsule**
870 miles - LEO
Nose Cone, Interior Fittings

- **Blue Ghost**
252K miles – Lunar Landing
Advanced Materials

- **Lunar Reconnaissance Orbiter**
252K miles – Lunar Orbit
High Gain Antenna

- **James Webb Space Telescope**
1.5M miles - L2
Sun Shield

- **Mars Reconnaissance Orbiter**
140M miles
High Gain Antenna

- **Mars Surveyor**
140M miles
Solar Arrays

- **Viking Orbiter**
140M miles
Solar Arrays

- **Europa Clipper**
484M miles
High Gain Antenna

- **Deep Impact EPOXI**
429M miles
Antenna Reflector

- **Parker Solar Probe**
89M miles 430,000 mph - fastest human-made object
High Gain Antenna

- **Messenger Mercury Observer**
57M miles
Solar Panels

- **Spitzer Space Telescope**
130M miles
Solar Panels, High Gain Antenna, Outer Assembly

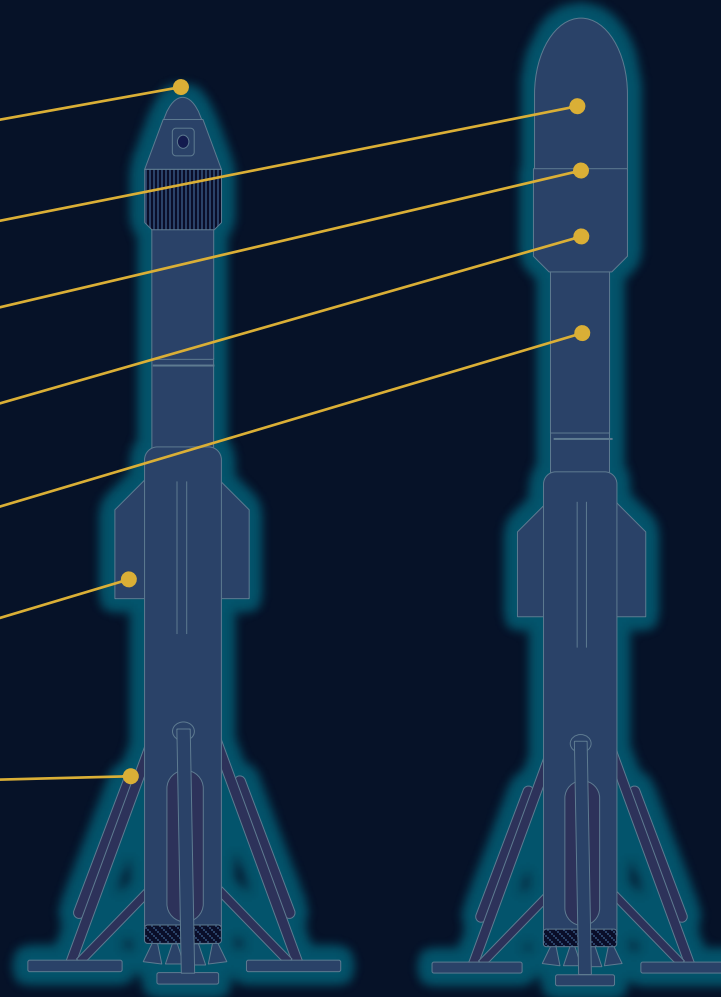
- **Voyager Spacecraft**
15.5 billion miles
Solar Arrays

Applied Systems Travel Beyond the Edge

Heavy Lift Launch Vehicles

Cargo and Crewed Missions

- Nose Cones
- Payload Fairings
- Satellite Dispensers
- Payload Adapters
- Body Panels & Fairings
- Aero Control Surfaces
- Reusable Landing Legs



Select Launch Vehicle Systems

Nose Cones & Fairings



Propellant Tanks & Engine Nozzles



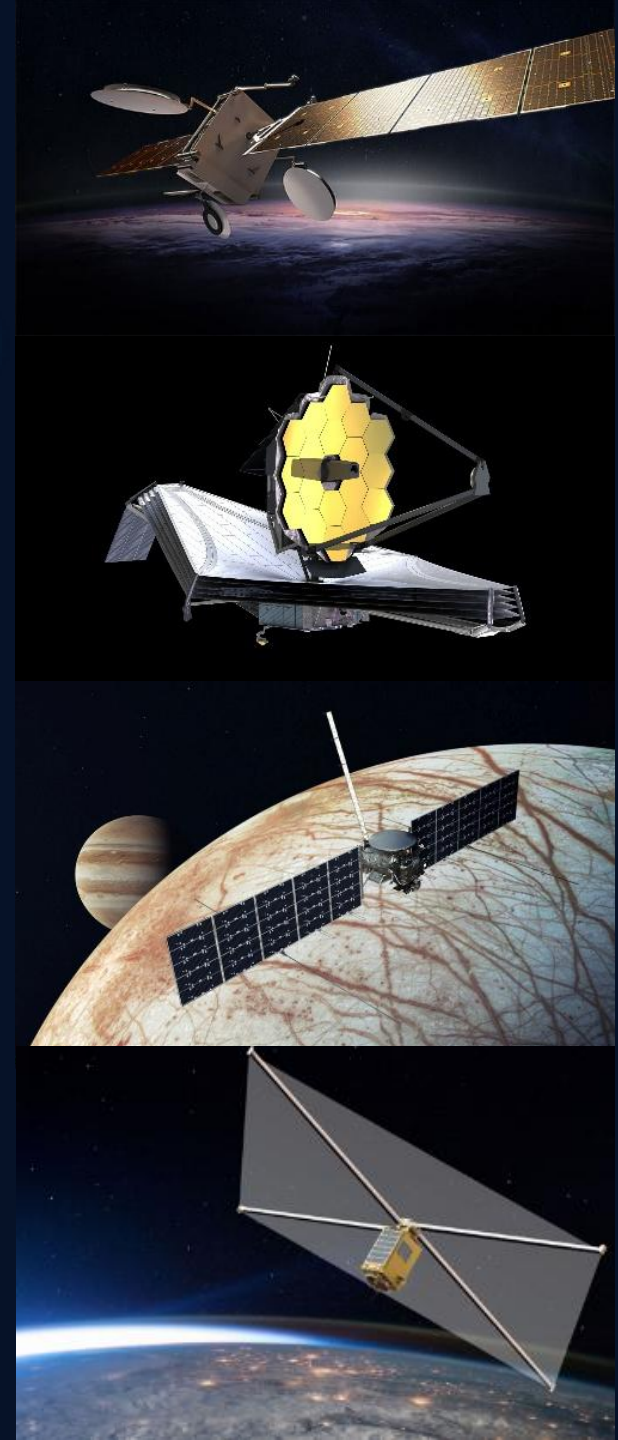
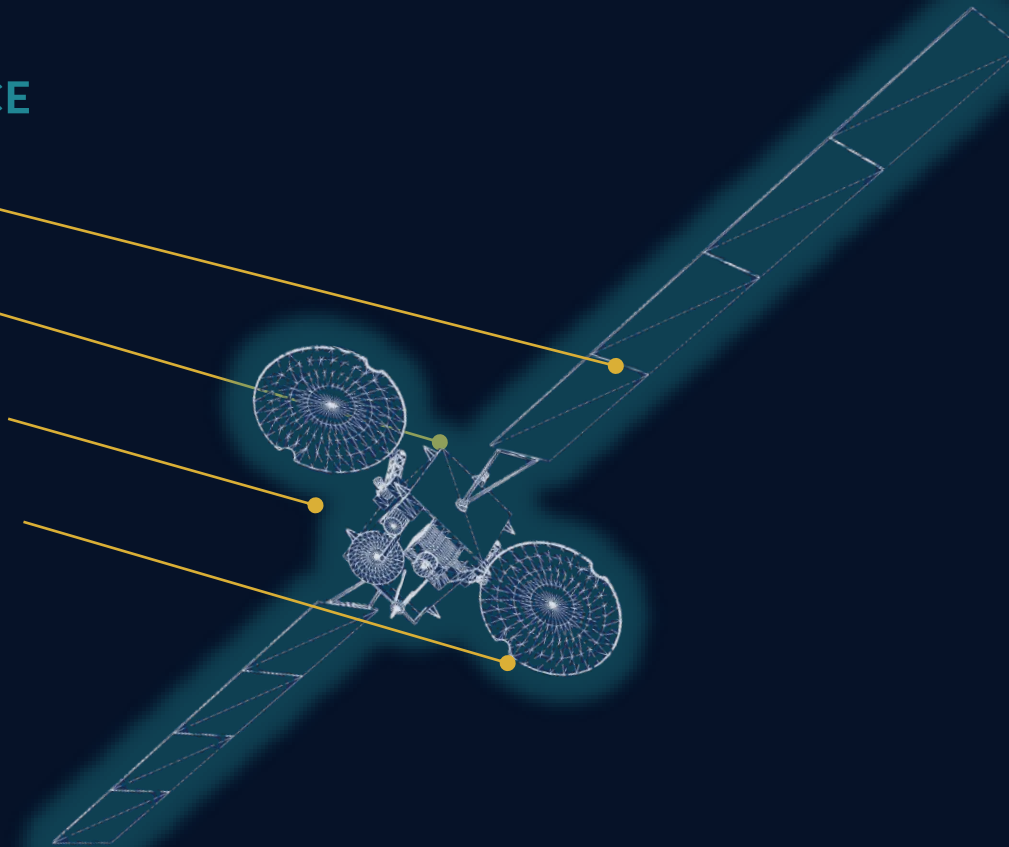
Landing Legs



Spacecraft & Satellites

LEO, MEO, GEO & DEEP SPACE

- Solar Array Assemblies
- Bus & Payload Modules
- Propellant Tanks
- Antennas
- Thermal Radiators
- Sun Shields & Solar Sails
- Passive Deorbit Systems



Satellite Bus & Payload Modules

Bus System
Large GEO Satellite

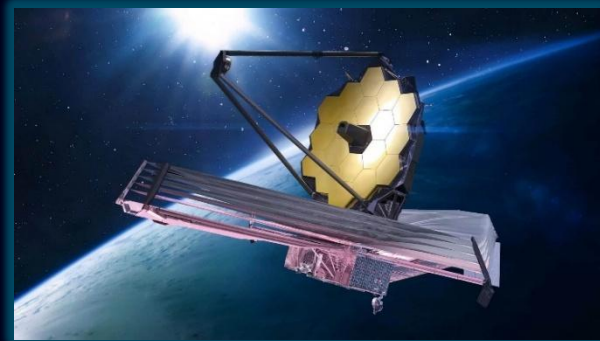


Complex Antenna
Communications

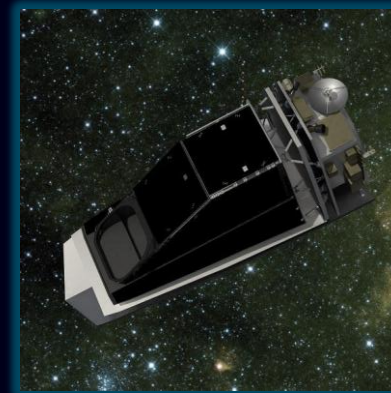


Sun Shields & Solar Sails

James Webb Space Telescope
Advanced Polymer Sunshade



Neo Surveyor
Rigid Composite Shield



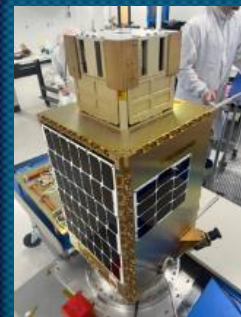
Introducing Spinnaker® Deorbit Drag Sails

Available in 5 Configurations

- FCC 5-year compliance
- Payloads to 1,000kg
- Orbits to 900km
- Self-deployable
- Light weight & compact (max 8kg)
- Scalable for constellations
- Cost-effective
- Easy integration



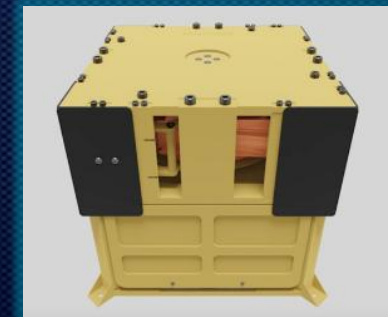
Spinnaker-Micro



Spinnaker-Standard



Spinnaker-Max



For satellites, payload adapters, and upper stage launch vehicles

Defense Aviation Heritage

ISR & Electronic Warfare

*E-2D Hawkeye
P-8 Poseidon*



UAV & Autonomous

*YFQ-44 Fury
XQ-58 Valkyrie
MQ-27 ScanEagle*



Refueling

*KC-46 Pegasus
KC-135 Stratotanker*



Strategic

*B1-B Lancer
B-52 Stratofortress
B-21 Raider*

Multi-role & Hybrid

*MV-75 (Valor)
V-22 Osprey*



Air Superiority

*F/A-18 Super Hornet
F-35 Lightning II
F-22 Raptor*

Attack & Air Support

*AH-64 Apache
CH-47 Chinook
CH-53 Stallion
UH-60 Blackhawk*



Enabling Air Dominance

50+
Fixed Wing

40+
Rotorcraft



- Fighters
- Bombers
- Surveillance
- Support

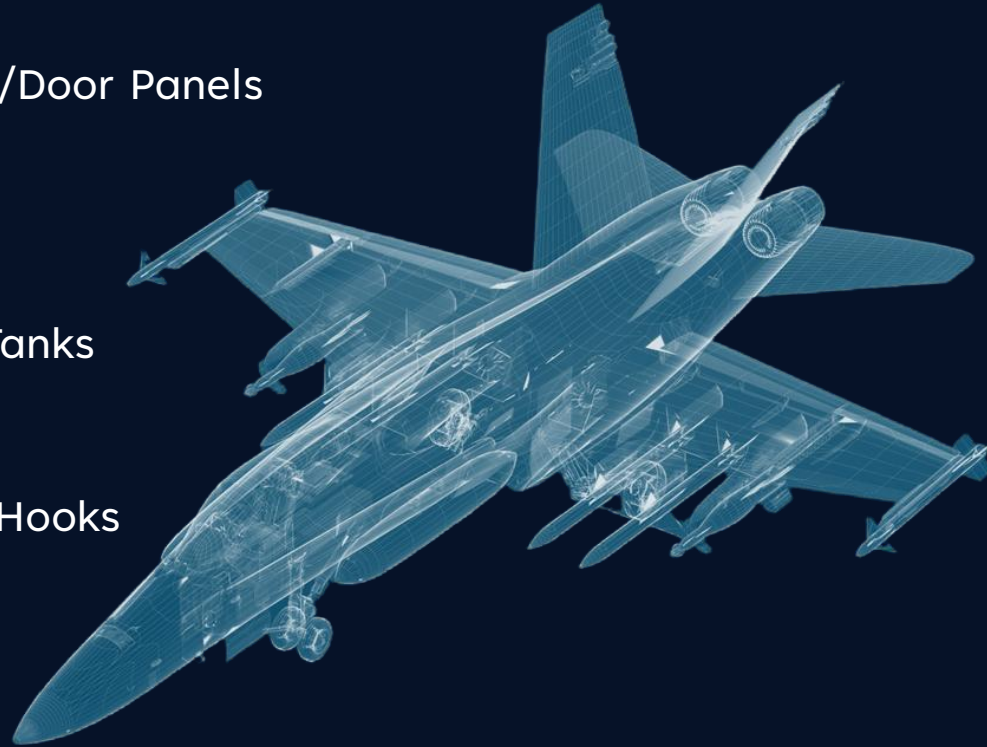


Piloted &
Unmanned
Aerial
Systems

More Than 50 Fixed Wing Aircraft

COMBAT | SURVEILLANCE | TANKERS | UNMANNED

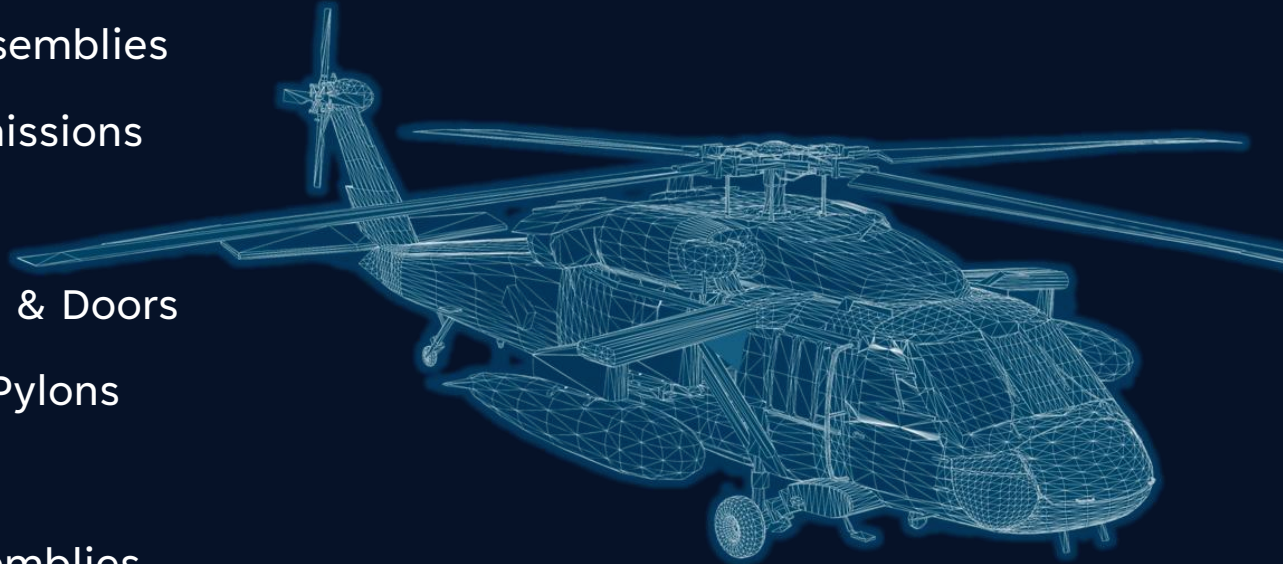
- Control Surfaces & Access/Door Panels
- Wing Assemblies
- Fuselage & Empennage
- Internal & External Fuel Tanks
- Canopy Appliques
- Landing Gear & Arrestor Hooks



More Than 40 Rotor Wing Aircraft

TRANSPORT | UTILITY | ASSAULT | SEARCH & RESCUE | SURVEILLANCE

- Rotor Hub Assemblies
- Power Transmissions
- Drive Shafts
- Access Panels & Doors
- Fuel Tanks & Pylons
- Landing Gear
- Fuselage Assemblies



Select Critical Flight Systems

Wing Assemblies & Control Surfaces



Fuselage & Empennage Assemblies



Dynamic Systems & Transmissions



Low Observable Canopy Materials



Drop Tanks & Refueling Systems



Landing Gear & Arrestor Systems



C5ISR & Precision Strike

National Security Mission Platforms

Missile Defense

*Terminal High Altitude Area Defense (THAAD)
Missile Sleeves, Conduits, Ballistic Enclosures*



Missiles & Ordnance

*Rocket motor and weapons casings
Massive Ordnance Penetrator (MOP), BLU-136, Mk-72*



C5ISR Sensors

*Lower Tier Air and Missile Defense Sensor (LTAMDS)
Electronic Steerable Array (ESA)*



RADAR & Communications

AN/SPY-6 Active Electronically Steerable Radar Antennas EHF/VHF radomes for navel vessel communications



Military Traffic Control

Air Traffic Navigation Integration Coordination (ATNAVICS)



Undersea Warfare

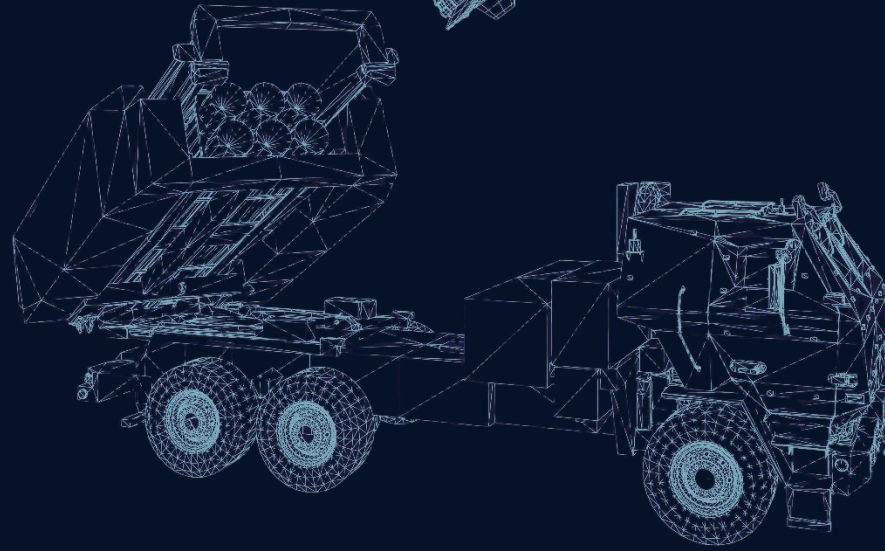
Machinery for next generation Mark 48, 54, 58 submarine torpedoes



Integrated Air & Defense Systems

STAND-OFF & FORWARD DEPLOYED MISSIONS

- Missile Bodies
- Solid Rocket Motor Cases
- Tubes & Launch Sleeves
- Ballistic Enclosures
- ISR Sensor Mounts
- Communication Antennas



Select C5ISR & Precision Strike Systems

Radar Antenna & Sensors



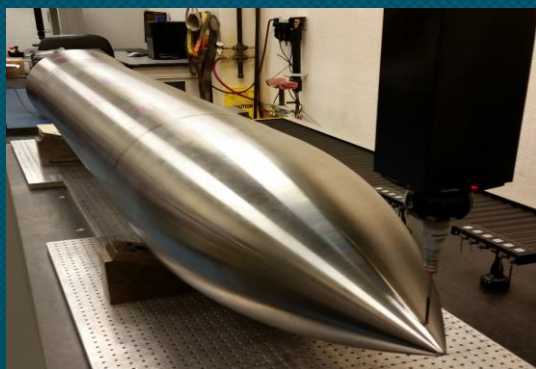
Missile Launcher Tubes & Sleeves



Strategic Missile Components



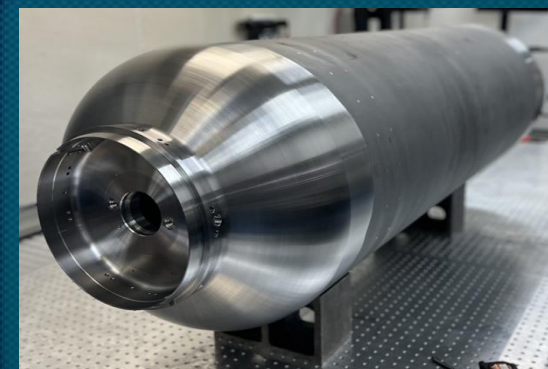
Precision Ordnance Casings



Missile & Bomb Bodies



Solid Rocket Motor Casings





The Applied Advantage

Design Engineering to Full Lifecycle Manufacturing at the Speed & Scale of Modern Space and Defense



Advanced Composites



Precision Machining



Assembly & Integration



Testing & Inspection



APPLIED
AEROSPACE & DEFENSE